

DEPARTMENT OF EPIDEMIOLOGY

ANNUAL REPORT

1984-1985

I. DEPARTMENT ORGANIZATION AND ADMINISTRATION.

The Department of Epidemiology is comprised of a multidisciplinary faculty offering professional training in seven primary program areas: Cardiovascular Disease, Cancer, Environmental/Occupational Epidemiology, Health Services Research, Infectious Disease, Reproductive Epidemiology and Social/Behavioral factors affecting disease. Responsibility for coordination of each program area has been delegated to a Program Director or Co-Directors who specialize in the specific area. The Department's teaching programs are built upon a firm foundation of research activities. The Department is administered by the Chairperson, assisted by a Deputy Chair for Academic Affairs and by the following committees and assemblies:

ACADEMICS

The Admissions Committee includes faculty in all major research areas of the department. Following individual faculty reviews of all applications, the Admissions Committee evaluates the strengths and weaknesses of each, ranking the applicants who are acceptable in order of priority. The Committee submits its recommendation to the Department Chairperson, who makes the final recommendation to the Graduate School.

The Graduate Studies Committee (GSC) concerns itself with the broad issues of curriculum, focusing on the insufficiencies in current course offerings, and making recommendations for the development and implementation of courses designed to meet those needs. In addition, as issues arise from the general faculty concerning academic policy or procedures, the GSC is charged with studying the issue and reporting back to the full faculty with recommendations for future policy.

The Full Faculty serves as a Promotions Committee to consider the promotion of students who are completing their masters work and wish to continue into the doctoral degree program. Student petitions to continue into the doctoral degree program are presented by the advisor. The advisor also provides a summary of

the student's work so far in the Epidemiology program, and a recommendation regarding the student's potential and suitability for doctoral work. The Promotions Committee submits its recommendation to the Department Chairperson for implementation.

The Doctoral Qualifying Examination Committee and the Masters Comprehensive Examination Committee are responsible for developing and administering the two major examinations for the Doctoral and Masters programs. Membership in these committees rotates on an annual basis. Both are assisted by the department's Registrar. Additional input is provided by the Graduate Studies Committee and the Full Faculty.

GENERAL ADMINISTRATION

The Full Faculty meet regularly to discuss ongoing and proposed research projects, and to discuss academic and administrative issues. Meetings are open to students except when matters of a confidential nature are to be discussed.

The Seminar Committee is chaired by a faculty member on an annual rotation basis. The Committee [Bairman receives suggestions for speakers from all faculty and students, invites the speakers, and organizes the seminar schedule for the fall and spring semesters. Seminar activities are evaluated at the end of each semester by the entire faculty with participation from students.

The Space Committee concerns itself with the issues of space utilization and needs for the Department. the Committee meets regularly to discuss and make recommendations regarding space allocation for the entire Department, which includes faculty, students, project groups and the administrative staff.

The Computer Committee (COMCOM) is comprised of faculty members, students, and administrative staff. The Committee will assist in providing adequate User Service for students and faculty, developing specific recommendations for computer budgets in grant applications, and establishing a departmental resource for information regarding equipment purchases.

The administrative support staff continues to operate under an administrative reorganization implemented in 1984. A Deputy Chairman for Academic Affairs (Professor Berton Kaplan) was named to develop academic policies and to assume a facilitative role with students and faculty, and to provide related administrative support.

Support Staff

(as of July 1, 1985)

Administrative Staff

Gail King	Business Manager
Joyce Allen	Registrar
Jinny Reid	Secretary to the Chairperson
Violet Krall	Accounting Office Manager

Secretarial Staff

Phyllis Johnson	Admin. Secretary V
Edna McKinnon	Secretary IV
Betsy Seagroves	Secretary IV
Becky Townsend	Secretary IV
Madeline Walker	Secretary IV
Carmen Woody	Secretary IV
Sally Zimney	Secretary IV

Research Staff

Jo Heiss	Research Associate
Ed Hunt	Social Research Assistant
Marilyn Knowles	Social Research Assistant
Diane Ramsey	Social Research Assistant
Edward Siff	Social Research Assistant
Susanne Wolf	Research Associate

Data Processing Staff

Terry Hudgins	Computer Programmer III
Marti McLanahan	Data Processing Assistant
Veda Manley	Data Processing Coordinator
Vic Rhodes	Computer Programmer II

Employee Terminations

Carol Parrow	Administrative Officer
Pat Taylor	Secretary IV
Noreen Qualls	Secretary IV
Lesa McPherson	Secretary IV
Johanna Smith	Research Assistant
Elizabeth Watts	Accounting Technician

II. INSTRUCTIONAL PROGRAMS

A. Courses and Curricula

1. Major Changes During the Year:

A major examination of the curriculum begun during the 1983-84 academic year has continued. This examination focuses primarily on the major elements in the training of an epidemiologist and attempts to identify gaps in training opportunities available. Long-term goals are to assess courses and areas to which students are exposed and to plan for increased coherence of the curriculum.

2. New Programs being Planned or Deletions made, including Reasons for Adding or Dropping Program.

In response to increased need for research in the infectious diseases a program area in infectious disease epidemiology was added to the curriculum.

A comprehensive multidisciplinary course on fundamentals of oncology, planned during the 1983-84 academic year in association with the Cancer Education Program and the Department of Pathology, was initiated during 1984-85. This course provides students involved in cancer research with needed biomedical background.

In response to a need perceived by students and the Graduate Studies Committee, a new methodology course was initiated as a second level to the existing course in advanced methods in epidemiology.

Courses on Health Promotion/Disease Prevention and on Pharmacoepidemiology were added during the past year.

3. Participation in Interdepartmental or Inter-institutional Programs.

Within the School of Public Health, the Department of Epidemiology is involved extensively with the Occupational Health Studies Group, the Collaborative Studies Coordinating Center, and the Carolina

Population Center. Many of our research programs require the participation of a multidisciplinary faculty, some of whom are drawn from within the School. In addition, our faculty are called upon to lecture in courses offered through other School of Public Health Departments, including an Off-Campus Masters program for which we offer an introductory epidemiology course.

The School of Medicine has been a natural associate on a number of research and teaching efforts. Of particular note are our involvement in the Robert Wood Johnson Clinical Scholars Program (Dr. Hulka, and others), the Joint MD/MPH and MD/PhD programs, and the Family Medicine Postgraduate Fellowship Program, and the Regional Medical Program for which we offer an introductory Epidemiology course. We have participated in teaching programs of the Schools of Arts and Sciences and Nursing. Physicians in the Duke University Occupational Medicine Fellowship program also receive MPH training in the department.

Centers within the Division of Health Affairs, such as the Health Services Research Center, and the Cancer Research Center, draw upon our faculty to provide epidemiologic expertise required in the conduct of their research. Dr. Barbara Hulka chairs the Epidemiologic Section of the Cancer Research Center.

Our faculty have continued to be involved in programs sponsored by other institutions through their participation in short courses, Summer Institutes, and seminar programs. Consultation activities on research programs of other institutions are common. We have increased our association with the Veterans Administration by collaborating on pilot research projects and developing training programs for physicians and health services researchers. We continue to have faculty membership on the Advisory Committee on the Health Services Research Program between the School of Public Health and the Veteran's Administration Health Services Research Program in Durham.

The Department participates in the two off-campus Master's programs offered through

the Department of Health Policy and Administration. During the past year, Dr. Caroline Becker taught the introductory epidemiology course in these programs.

B. Enrollment.

1. Number of Graduate Students by:

a. <u>Degree</u>	<u>Fall 1984</u>	<u>Spring 1985</u>
Ph.D.	22	25
M.P.H.	26	18
M.S.P.H.	13	14
b. <u>Race-Minority Status</u>		
Black Male	3	3
Black Female	4	4
White Male	24	23
White Female	24	23
Foreign Male	2	1
Foreign Female	1	1
Asian Male	2	1
American Indian Female	1	1
c. <u>In-State Residency</u>	28	26
d. <u>Out-of-State Residency</u>	30	29
e. <u>Foreign Students</u>	3	2

2. Number of Degrees Awarded:

	<u>Ph.D.</u>	<u>M.P.H.</u>	<u>M.S.P.H.</u>
August 1984	4	2	4
December 1984	0	4	2
May 1985	2	3	1

3. Comment on the Quality of Students.

The quality of students in the department continues to be outstanding. Selected from an impressive pool of applicants, a number of our students are accomplished professionals whose considerable publishing and presentation activities continue along with their studies in Epidemiology. All students have demonstrated their academic and research ability before coming to the Department. GRE quantitative scores are consistently above the 70th percentile.

4. Apparent Trends in Job Placement of Graduates.

Demand for graduates in Epidemiology, particularly at the PhD level, continues to be high. The areas of Occupational, Cardiovascular Disease, and Cancer Epidemiology appear to be expanding and demand trained epidemiologists specialized in these areas. The need for researchers in the infectious diseases seems to be increasing. Graduates find positions in government, industry and academics.

5. Minority Student Enrollment Efforts.

Inquiries and applications from qualified minority students have been vigorously pursued by letter and by telephone. Applicants have been referred to various faculty members and students for personal contact. In particular, meetings were arranged with current minority students, who have been able to discuss the social and academic climate for minorities here. Travel funds have been solicited to support visits by minority applicants. Individual contact with prospective minority applicants has been made through current minority students who have brought in applicants from their baccalaureate institutions, and through minority alumni who have made personal contact with prospective applicants, given recommendations for them, and in many cases have provided internship experiences at the application or student stage.

6. Significant Achievements of Majors.

Honors:

Named to Delta Omega, Theta Chapter:
Robert S. Dittus, Ellen F. Heineman, Alice D. White.

Named to "Outstanding Young Women of America": Brenda P. Gant.

Dissertations Completed:

Alowaisi, Rashed: "Compliance With, and Effectiveness of, Specialized Care of Hypertension in Kuwait, 1983-84" Kuwait Hypertension Intervention Program (KHIP). May, 1985

La Croix, Margaret Floyd: " Occupational Exposure to High Demand/Low Control Work and Coronary Disease Incidence in the Framingham Cohort" August, 1985

McCann, Margaret Floyd: "'The Effect of a Progestin-Only Oral Contraceptive on Lactation" August, 1984

Stillman, Rebecca Anne: "The Families of Elderly Stroke Patients: Effects of Home Care" August, 1984

Somervell, Philip David: "Generalized Psychological Distress as a Predictor of Mortality" August, 1984

Waldman, Gwen Thea: "The Influence of Sunlight and Other Risk Factors on the Development of Lens Disease" August, 1984

Grants Awarded For Student Projects:

Predictors of Survival Among MI Patients in North Carolina. American Heart Assoc., 7/1/84-6/30/85. (Johnson).

P-Waves in EKGs of 600 Hypertensives Before and After Therapy. American Heart Assoc., 7/84-6/85. (Logue).

Publications or Presentations by Students:Brawley, Robert L. MD.

Brawley, RL, Wenzel, RP: An algorithm for chickenpox exposure. *Pediatr. Infect. Dis.* 1984; 3:502-504.

Brawley, RL: Mormons, honey, and infant botulism. *AJDC* 1984; 138 (letter to the editor).

Brawley, RL: a pack is not a "pack" is not a pack. *JAMA* (in press) (letter to the editor).

Brawley, RL: Treatment of *Pneumocystis carinii* pneumonitis. *AJDC* (in press) (letter to the editor).

Brawley, RL, Wenzel, RP: Reduction in postoperative wound infection rates: A 10-year prospective study of 20902 operations at the University of Virginia. Twenty-fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, October 1984 (Abstract and Presentation).

Brawley, RL, Wenzel, RP: Nosocomial infections: An incidence study of the risk of multiple infections. Twenty-fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, October, 1984 (Abstract and Presentation).

Brawley, RL, Cabezudo, I, Guenther, SH, et al: Evaluation of handwash agents using brief contact times. Twenty-fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, October 1984 (Abstract and Presentation).

Disney, Judith A.

Newbrun, E., Matsukubo, T., Hoover, E.I., Graves, R.C., Brown, A.T., Disney, J.A., and H.M. Bohannan, Comparison of Two Screening Tests for Streptococcus Mutans and Evaluation of Their Suitability for Mass Screenings and Private Practice, Comm. Dent. Oral Epid., 12:325-331, (October) 1984

Stamm, J.W., Bohannan, H.M., Graves, R.C., and J.A. Disney, The Efficiency of Caries Prevention with Weekly Fluoride Mouthwashes, J. Dent. Ed. 48:617-624, (November) 1984

Klein, S.P., Bohannan, H.M., Bell, R.M., Disney, J.A., Foch, C.B., and R.C. Graves, The Cost and Effectiveness of School-Based Preventive Dental Care, Am. J. Pub. Health, 75:382-391 (April) 1985

Bohannan, H.M., Disney, J.A., Graves, R.C., Anderson, P.E., and S.P. Klein, Operation of the National Preventive Dentistry Demonstration Program, J. Pub. Health Dent. 45(2):75-82, (Spring) 1985

Bohannan, H.M., Graves, R.C., Disney, J.A., Stamm, J.W., Abernathy, J.R., and J.D. Bader, Effect of Secular Decline in Caries on the Evaluation of Preventive Dentistry Interventions, J. Pub. Health Dent. 45(2):83-89, (Spring) 1985

Bohannan, H.M., Klein, S.P., Disney, J.A., Bell, R.M., Graves, R.C., and C.B. Foch, A Summary of the Results of the National Preventive Dentistry Demonstration Program, J. Canad. Dent. Assn. 51:435-441 (June) 1985

Disney, J.A., Reaction and Discussion of Sealants for Community Programs, J. Canad. Dent. Assn. (accepted for publication March 1985)
Bohannon, H.M., Stamm, J.W., Graves, R.C., Disney, J.A., and Bader, Fluoride Mouthrinse Programs in Fluoridated Communities, JADA (accepted for publication March 1985)

Heineman, Ellen F.

Johnson, J.L., Heineman, E.F., Heiss, G., Hames, C.G., Tyroler, H.A. Risk factors and 20-year CVD mortality in black and white women in Evans County, Georgia (in press, Amer. J. Epidemiol.).

Johnson, Jeffrey.

Presentation: 36th Annual Meeting of the NC Affiliate of the AHA, Raleigh, NC, May 1985. "Survival Following Myocardial Infarction in Eastern NC."

Presentation: CV Epidemiology and Biostatistics Research Training Session, NHLBI, Tampa, Florida, March 1984. "Risk Factors and Twenty-Year CVD Mortality in Black and White Women Aged 40-64 in Evans County, Georgia."

Walden, CE, Knopp, RH, Johnson, JL, Heiss, G, Wahl, PW, Hoover. Effect on estrogen/progestin potency on clinical chemistry measures: The LipidResearch Clinics Program Prevalence Study (in press. Amer. J. Epidenio.).

Johnson, J.L., Heineman, EF, Heiss, G., Hames, CG, Tyroler, HA. Risk factors and 20-year CVD mortality in black and white women in Evans County, Georgia. (in press. Amer. J. Epidenio.).

Logue, Everett, PhD.

Presentation: 36th Annual Meeting of the NC Affiliate of the AHA, Raleigh, NC, May 1985. "P-Wave Analysis."

Reitnauer, Pamela J.

Swift, M., Reitnauer, P.J., Rao, K.W. Hereditary and other antecedent conditions of childhood neoplasia. Pediatric In: Neoplasia, Saunders, 1985.

Strogatz, David, PhD.

Presentation: CVD Epidemiology & Biostatistics Training Session, March 6, 1985; Tuscon, Arizona.

"Electrocardiographic Abnormalities and Mortality Among Middle-aged Black and White Men of Evans County, Georgia."

Wheat, John.

Hulka, B.S., Wheat, J. Patterns of Utilization,
The Patient Perspective. Med. Care 23(5):438-
460, 1985.

Wing, Steven.

Wing, Steven, Tyroler, H.A. and Morton, Kenneth
G. "The Participant Effect: Mortality in a
Community-Based Study Compared to Vital
Statistics." JCD 38:2, pp. 135-144, 1985

C. Teaching Load of Faculty

Fall Semester 1984

Instructor	Course Number	Course Title	Total Enrolled	PHO	HU	EC	AS	GRO	MED	Other	Course Hours
Becker	EPID 140	Probs in Epidemiology	6	6							var
	EPID 211	Determin.of Commun.Dis.	10	10							2
	EPID 160	Sec. 975									
Checkoway	EPID 360	Research in Epidemiology	1	1							VAR
	EPID 392	Master's Paper	2	2							VAR
Davis	EPID 256	Card. Dis. Epidemeology	14	13		1					3
Fletcher, R.	EPID 140	Problems in Epidemiology	6	6							VAR
	EPID 360	Research in Epidemiology	2	2							VAR
	EPID 392	Master's Paper	2	2							VAR
Fletcher, S.	EPID 140	Problems in Epidemiology	5	5							VAR
Haynes	EPID 270	Behavior & CVD	7	6				1			3
Heiss	EPID 160	Principles of Epidemeology (with others)	146	137		2		7			3
	EPID. 256	Cardiovasuclar Dis.Epid. (with others)	14	13	1						3
	EPID 257	Teaching Internship (with others)	7	7							4
	EPID 360	Res. in Epidemeology	1	1							VAR
	EPID 392	Master's Paper	1	1							VAR
EPID 394	Doctoral Dissertation	3	3							VAR	
Hulka	EPID 168	Fundamentals of Epid. (With others)	39	33		5		1			3
	EPID 360	Res. in Epidemeology	2	2							VAR
	EPID 394	Doctoral Dissertation	2	2							VAR
James	EPID 360	Research in Epidemiology	1	1							VAR
	EPID 270	Behavior & CVD Epid (with others)	7	6				1			VAR
	EPID 392	Master's Paper	1	1							VAR
	EPID 394	Doctoral Dissertation	1	1							VAR

A. Resesearch Programs in Operation during the Year.

CANCER EPIDEMIOLOGY

Hormonal and Personal Effects on Estrogen Receptors in Breast Cancer. Since high estrogen receptor protein (ERP) in breast cancer tissue has a favorable effect on patient prognosis, factors influencing ERP levels are the focus of this research. Two hundred forty-six histologically confirmed primary breast cancer patients from three North Carolina hospitals were interviewed and provided with photographic displays of hormonal products. Their tumor tissue was analyzed for ERP by the sucrose density gradient (SDG) assay. Data were analyzed by multiple regression and logistic regression techniques. An association appeared between use of progestin-predominant and intermediate types of oral contraceptives (OCs) and low ERP. Replacement estrogens were unrelated to ERP levels. An effect of menopausal status, independent of age, was not evident, but the number of patients in the relevant age bracket was small. Statistically significant associations involved age and race among postmenopausal patients. With black breast cancer patients less than age 70 years as the reference group, the relative odds of having high ERP (greater than 10 fm/mg cytosol protein) was 2.4 times greater among whites less than age 70, 1.6 times greater in blacks aged greater or equal to 70, and 12.8 times higher in whites greater than or equal to 70 years. These differences in ERP may contribute to the black/white differential in breast cancer survival. (Hulka)

Training Grant in Cancer Epidemiology. The objective of this training program is to equip health professionals with epidemiologic and quantitative skills, such that upon completion of the program they may assume leadership roles in both cancer research and cancer control programs. The various types of cancer, their causative factors and the methods used in developing and sustaining new etiologic hypotheses provide the model for study of cancer epidemiology. The focus for this program has three components: 1) To integrate knowledge from epidemiology,

clinical practice and the basic sciences about specific types of cancer; 2) To synthesize information on the carcinogenic potential and mechanisms of action of known classes of carcinogens, exogenous and endogenous; 3) to emphasize those methods in epidemiology which are particularly relevant to the study of cancer and other chronic diseases. Students will be provided with this informational base and they will be assisted in developing research skills to formulate meaningful hypotheses and design feasible studies which they themselves can execute. The approach will be to formulate an individualized curriculum for students who have the interest and potential to be innovative thinkers and thorough researchers. The intent is to produce cancer epidemiologists who can assume leadership roles in epidemiologic studies, and provide knowledge, consultative support to multidisciplinary cancer research with a primary focus in areas other than epidemiology. (Hulka, Beresford, Sandler, Schoenbach, Shy,)

Hormone Receptors and Serum Assays in Prostatic Cancer. The etiology of prostate cancer is poorly understood, despite the fact that it is the second most common cancer among U.S. males. The importance of gonadal hormones on prostate growth regulation has suggested an obvious direction for inquiry; however, the nature of the association between gonadal hormones and prostate cancer risk has yet to be specified, as evidenced by conflicting findings reported in the literature. It is proposed to develop a reliable autoradiographic assay for measuring levels of steroid hormone receptor content in normal, malignant and benign hyperplastic prostate tissue. The autoradiographic assay will be validated against existing biochemical techniques in animal tissue. A comparative pilot study on 20 patients with newly diagnosed prostatic adenocarcinoma and 20 patients with newly diagnosed benign prostatic hyperplasia will provide descriptive data on hormone receptor distributions, by age and race. Additionally, serum levels of testosterone, 17-beta-estradiol and prolactin will be measured and correlated with autoradiographically determined measurements of hormone receptor activity. The findings from this study will be used

subsequently in the planning and conduct of multi-center case-control study of the associations between serum hormone levels, tissue receptor activity and risk for prostatic cancer in whites and blacks. (Hulka, Checkoway).

Cervical Neoplasia: HPV Epidemiology & Molecular Biology. To determine the importance and role of human papillomaviruses (HPVs) in the etiology of cervical neoplasia, an epidemiological and a molecular investigation will be conducted of patients with normal cervical cytology; condyloma; cervical intraepithelial neoplasia (CIN) grades 1, 2, and 3; carcinoma in situ; or invasive cervical carcinoma.

(A) The epidemiological study will focus on patients with CIN and normal cytology. Data will be collected from these patients regarding (1) the general characteristics of the patient population: age, race; (2) the distribution of risk factors for cervical cancer -- sexual behavior, use of contraceptives, smoking habits; (3) the histopathological diagnosis and medical history of these patients; (4) the genetic type of HPV(s) found in cervical swabs, aspirates, or biopsy samples; and (5) the progression or recurrence of lesions in the course of this study. These data will be analyzed to compare the demographic and risk factor characteristics of women infected with different HPV types and with different grades of CIN. (Hulka, Marshall)

Endometrial Cancer Risk and Steroid Hormone Use in Postmenopausal Women. This study is being proposed to the Gynecologic Oncology Group, a nationwide clinical trials group for the testing of new therapies for gynecologic cancers, as an initial research project to demonstrate their capabilities in conducting epidemiologic studies. The objective of the study is to estimate the differential risk of endometrial cancer associated with no steroid hormone therapy, estrogen only therapy, and combined estrogen plus progestagen therapy in postmenopausal women. The current American College of Obstetrics and Gynecology recommendation, when prescribing etrogens for relief of menopausal complaints, is to prescribe progestagens in the latter part of the estrogen cycle. This recommendation is based on findings from three sets of studies, all of which have serious deficiencies for addressing this question. For this reason, we have proposed a

case-control study of newly diagnosed endometrial cancer patients and community controls obtained through random digit dialing. Information on hormone use, menopausal symptomatology, reproductive and menstrual history and demographic characteristics would be obtained by standardized questionnaire using telephone interviews. (Hulka, Beresford)

Risk Factors for Uterine Sarcoma. Uterine sarcomas are rare tumors of the uterine fundus of diverse histologic types. Case reports and case series appear in the literature but there have been no analytic epidemiologic studies of these tumors including comparison groups. For this reason we are proposing a case-control study, exploratory in nature, of uterine sarcomas to be undertaken by the gynecologic Oncology Group. Their resources would be particularly desirable for this study since the rarity of the tumor requires multiple centers for ascertainment of sufficient numbers of cases and the diversity of their histologic forms requires the involvement of experienced gynecologic pathologists, who are extensively involved with Gynecologic Oncology Group therapeutic protocols.

The use of random digit dialing controls and telephone interviews would allow interdigitation between this and the endometrial carcinoma protocol and the potential for evaluating etiologic factors which these presumed disparate tumors may actually have in common. (Hulka, AbdElghany)

Cigarette Smoking, Alcohol Consumption and Breast Cancer. The effects of cigarette smoking and alcohol consumption on breast cancer risk were investigated in 276 primary, histologically confirmed breast cancer patients and 1519 community-based comparison subjects identified in 1977 and 1978. Information on cigarette smoking history, alcohol consumption and other pertinent personal and medical characteristics was obtained from each study subject by questionnaire. Compared to women who reported to have never smoked, current smokers were at decreased risk of breast cancer. After adjusting for age, race, estrogen use, oral contraceptive use and alcohol intake, the relative risks were 0.75 (95% CI, 0.52-1.09) in current smoker of 1-20 cigarettes per day and 0.57 (95% CI, 0.30-1.08) in those who smoke more

than 20 cigarettes per day. A decrease in risk was not seen in former smokers (RR=1.16, 95% CI, 0.80-1.69). The relationship between alcohol consumption and breast cancer is more complex due to the presence of significant effect modifiers. In particular, the risk of breast cancer in women who have one or more alcoholic drinks per week as compared to those who drink less or none was increased for whites, premenopausal women and those with previous gall bladder disease. the crude odds ratio for alcohol consumption was 1.19. (Hulka, O'Connell, Chambless, Deubner, Wilkinson)

The Influence of Exogenous Estrogen Use on Survival After Diagnosis of Endometrial Cancer.
 To examine the effect of prior exogenous estrogen use on survival after diagnosis of endometrial cancer, 244 endometrial cancer cases identified between 1970 and 1976 were followed until 1982. The authors defined an estrogen user as a woman who took exogenous estrogen prior to diagnosis for at least six months. Estrogen user (N=46) were younger, had less advanced disease, were more likely to be non-obese and white than were non-users (N=198). the estimated probability of surviving (Kaplan-Meier) 5 years after diagnosis was .89 for users and .53 for non-users. When adjusted for stage, grade, age, race and obesity (using the Cox proportional hazards regression model), the survival probabilities for estrogen user continued to be higher ($\chi^2=4.04$, $p=.04$). The adjusted "risk" of death from all causes per unit time (Hazard ratio) for a non-user was 2.20 (1.02, 4.65) times that for an estrogen user. The adjusted risk of death per unit time from endometrial cancer only (N=80) was 4.29 (1.31, 14.09) times greater among estrogen non-users. The investigators observed no difference in the adjusted risk of death from causes other than endometrial cancer (N=35) per unit time between estrogen users and non-users. The more frequent occurrence of endometrial cancer in an earlier stage and grade among estrogen users is not the sole cause of their lower risk of death per unit time from this disease. (Hulka, Schwartzbaum, Fowler, Kaufman, Greenberg)

CARDIOVASCULAR DISEASE EPIDEMIOLOGY

Evans County Cardiovascular Studies. The Evans County Study is a biracial epidemiologic study of cardiovascular disease in a total community. Initiated in 1960, attempts were made to enroll all of the residents over 40 years of age and a random sample of those between 15 and 39 years of age in a longitudinal study which would span two decades. The study was designed to test an observation made by a primary care physician in his practice, i.e., the rarity of manifestations of coronary heart disease (CHD) in black patients, particularly males, despite markedly elevated blood pressure levels. The major result of this study was the delineation of risk factors for CHD. Numerous publications, dissertations, and theses have resulted from analyses of data derived from this study. Current analyses include studies of the black-white differences in mortality and relationship of total lipids, lipoprotein cholesterol and lipoprotein apoproteins to twenty year mortality. (Tyroler, Heiss)

Lipid Research Clinics Program (LRC Program). An international study of the epidemiology of lipoproteins and coronary heart disease involving prevalence, family studies, follow-up mortality studies and a large collaborative Coronary Primary Prevention Trial (CPPT). The CPPT results were positive and were published in January 1984, indicating a 20% reduction in CHD incidence by cholesterol lowering. Study results to date include population based distributions of lipids and lipoprotein-cholesterol fractions, and the use of ethnicity, education, occupation, and sex-hormone usage on the population levels of these parameters (publications in press). Examination of additional determinants of lipid and lipoprotein levels is currently underway (analysis stage). (Tyroler, Heiss)

Geographic and Temporal Variation in Mortality and Development of Health Indices, in Relation to Environmental Quality. This a Cooperative Agreement between the University of North Carolina Department of Epidemiology and the U.S. Environmental Protection Agency. The primary goals of this Cooperative Agreement are to study geographic and temporal variation in non-cancer disease mortality and the health effects of

selected environmental exposures including the cardiovascular sequelae of low dose exposure to lead. The Cooperative Agreement provides students in the Department of Epidemiology the opportunity to participate as Graduate Research Assistants. (Tyroler, Heiss)

Predictors of Coronary Disease in Blacks (The Charleston Heart Study). This is a subcontract with the University of South Carolina Medical School to examine the role of isolated systolic hypertension and other predictors of all cause and coronary heart disease survival in blacks and whites of the 1960 Charleston Heart Study and the 1960 Evans County Georgia Heart Study. The findings of both studies will be pooled together in order to identify predictors of physical functioning in older blacks; and whites; and to prepare rosters of the off-spring of the Charleston Cohort for future studies investigating genetic/familial influences on cardiovascular disease. This investigation will make important contributions applicable to treatment and prevention of cardiovascular disease by identifying the role of isolated systolic hypertension and other factors in the onset of cardiovascular disease, the race specific risk factors for coronary heart disease and the racial differences in manifestations of coronary heart disease. (Tyroler, Strogatz)

Pilot Evaluation Studies of High Blood Pressure Control. Household surveys combined with intervention trials are the basis for a study of hypertension and its treatment in a rural community. The household survey, completed in 1980, was designed to determine the prevalence of hypertension in the community, current knowledge, attitudes and beliefs about hypertension, and the hypertension medication practices of the population. Randomized intervention trials of moderate and severe hypertensives will be designed to measure efficacy of a variety of modalities which promote adherence to therapeutic regimens. Hypertension control programs in select churches and in low industrial subpopulations have been implemented to test the effectiveness of selected methods of hypertension control in these settings. A second household survey will be conducted in 1983 to assess the impact for the various efforts of hypertension control in the community. (Ibrahim, James, Becker, Tyroler, Wagner, Williams)

Psychosocial Factors Related to the Risk and Control of High Blood Pressure Among Black Men. This is a study of the influence of psychosocial factors on mean blood pressure levels (and on hypertension related health behaviors) on a probability sample of 132 black men (ages 17-60 residing in a rural, poor, eastern North Carolina town. Data collection was preceded by an eight week participant-observation study of men in the area. The community survey was conducted from November 1980 to February 1981. Several papers based on this work have been submitted for publication; one is "in press," and others are being written. The central focus of this work is the contribution that "John Henryism" (a measure of perceived control over the environment) makes to 1) predicting mean blood pressures of black men, and 2) explaining differences among them in hypertension-related health behaviors. This research was made possible by a grant from the Robert Wood Johnson Foundation and an NHBLI Research Career Development Award (1982-87). Future studies of John Henryism and risk of cardiovascular disease among white, female, and non-working class black populations are underway. (James).

Community Surveillance in the Southeastern United States. The purposes of this project were to monitor trends of incidence of fatal and non-fatal CHD and its relation to changing risk factors, through a system of prospective community surveillance. Such a system will take into account: current levels of cardiovascular disease and coronary heart disease mortality and declines in mortality since 1968; racial, ethnic, and socioeconomic variables; environmental exposures; adequacy of sample sizes for resolving critical questions of trends of incidence and their relation to trends of life styles, risk factors, and treatments; and standardization of methods of measurement.

Evidence of marked geographic variation in mortality attributed to coronary heart disease and cerebrovascular disease has been noted for more than 30 years in the southeast. The existence of a high mortality zone extending through the coastal plains, and an area of very low cardiovascular disease mortality, namely in the mountainous areas, has been identified. Since 1968, the southeast region of the US has shared in the general decline in cardiovascular

disease mortality exhibited by the entire nation. Our analyses suggest that this decline has occurred among all adult age groups, for both men and women, and for whites and blacks. However, there is evidence of differences in the rate of decline among these demographic subgroups, with the greatest percent decline having occurred in the black female and the least in the white female. There also is the suggestive evidence in analysis of trends within subregions of NC that the previously high-rate, coastal plains region, has experienced a lesser percent decline than the previously low-rate, mountain area.

The communities under study in North and South Carolina are biracial in composition, with a large proportion of black residents, and include both rural and urban communities. Two of the communities are located in the highest cardiovascular disease mortality region of the nation, counties in the NC coastal plains with approximately equal numbers of black and white residents, and residents of the Columbia, South Carolina SMSA, with approximately one-quarter black residents. The third community is comprised of residents of North Carolina Appalachian mountain counties, a region of previously low cardiovascular disease mortality risk with predominantly white residents. (Tyroler, Becker, Heiss)

Comprehensive Stroke Center Program. A study of hospitalized stroke outcomes in 15 counties of eastern North Carolina, this study is based on the evaluation of outcomes before and after the introduction of a Stroke Team in 20 community hospitals. The North Carolina program is participating with investigators in Oregon and New York in a national stroke study. (Becker)

Cardiovascular Epidemiology and Statistics. This research training program provides course work leading to the degree of Doctor of Philosophy in either epidemiology or biostatistics by combining the strong, accredited academic curricula of both Departments with the population and clinical resources required for intensive research training in cardiovascular disease. Programs of study are designed to meet the needs, capabilities and interests of the individual trainees. In addition to offering core and

supplemental courses leading to competency in the general disciplines of epidemiology and biostatistics, the Department of Epidemiology has developed a formal, two course sequence in Cardiovascular Disease Epidemiology, which is required for students funded by this grant. The course sequence is designed to elucidate the theoretical and methodological issues relevant to cardiovascular disease epidemiology, and to enable the students to develop research competency in this field. The program will maintain this focus, providing post-doctoral experience in cardiovascular disease research in both departments in addition to Ph.D. level training. Research training will continue to be accomplished through lectures, seminars, and directed research in specific areas crucial to the investigation of cardiovascular disease. Such concerns as genetic analysis, clinical trials, laboratory standardization and quality control, data management systems, field studies, evaluation of nutrition data, and theoretical epidemiologic and biostatistics research continue to be relevant to the program. (Tyroler, Heiss, Ibrahim)

OCCUPATIONAL and ENVIRONMENTAL EPIDEMIOLOGY

Retrospective and Prospective Cohort Studies of Two Communities Exposed to Aerial Spraying of Herbicides: Investigation of Possible Health Effects. The aim of this study is to determine whether a community exposed to aerial spraying experienced unusual health effects after the spraying and to document the magnitude of these effects, if any. Questionnaires will be administered to 180 study subjects, half of whom were exposed to aerial spraying. Results will be analyzed to evaluate the feasibility of such studies on a larger scale. (Shy).

Epidemiology Study of Cancer Risks in US Atomic Workers. The main objective of this study is to identify the long term effects of low-dose occupational radiation exposures to determine whether occupational radiation exposure standards have allowed the accumulation of detrimental effects of radiation. Sponsored by the US Department of Energy, this study is being conducted in collaboration with the Oak Ridge Associated Universities (Oak Ridge, Tennessee) with other participating faculty from the Departments of Biostatistics and Environmental

Sciences and Engineering. This research design involves mortality studies of large cohorts of workers employed in nuclear facilities and also case-control studies designed to determine the effect of confounding variables, including sources of medical radiation and chemical carcinogens. (Shy, Tyroler, Checkoway)

Mortality Study of Radiation-Exposed Workers. Three sub-projects (see above) underway are a mortality study of 8000 workers from the Oak Ridge National Laboratory (ORNL): a case-control study of hematologic malignancies among workers at several nuclear facilities in Oak Ridge, TN; and a cohort mortality study of roughly 6000 workers at a weapons manufacturing facility where uranium is the principal exposure. Preliminary results from the ORNL study indicate modest mortality excesses of leukemia, prostate cancer, and Hodgkin's disease; however, none was specifically related to radiation exposure. Analysis are being pursued further. The case-control study has only recently begun, and no results are yet available. (Checkoway).

Cooperative Health Hazard Evaluation Program. The Occupational Safety and Health Act of 1970 places on the National Institute for Occupational Safety and Health (NIOSH) the responsibility to conduct health hazard evaluations upon valid request by an employer and/or employees. This was the third year of a three-years demonstration program of health hazard evaluations performed by the Occupational Health Studies group (OHSg) of the School of Public Health. In the first year, health hazard evaluations involving a heat set fabric molding operation, a printing process, an aircraft fuel cell manufacturing operation, a university office building, and an analytic chemistry laboratory, have been assigned to the UNC Research group by NIOSH. Some eight to ten additional assignments of a similar nature were made during the year. (Checkoway, Shy).

Mortality Study of Workers in the Florida Phosphate Industry. This is a retrospective cohort mortality study of approximately 25,000 employees in the phosphate industry in Florida. This industry manufactures fertilizers and component materials such as phosphoric acid. The original concern in the industry was an apparent excess of lung cancer mortality,

presented to be related to ionizing radiation exposure.

The mortality patterns of industry workers will be compared with those of the US and Florida populations for the years 1950-78. Excesses from cause-specific mortality will be examined in relation to work experience and estimated exposures to chemicals and ionizing radiation. Preliminary findings show roughly 50% mortality excesses from lung cancer and emphysema. Analysis are being continued. (Checkoway, Shy).

A Project to Evaluate Existing and Potentially New Health Data Reporting Systems in North Carolina and to Evaluate Their Suitability as a Monitor of Adverse Health Effects from Population Exposure to Toxic and Hazardous Pollutants. This project has been designed primarily to address the issue of a comprehensive functional statewide cancer incidence registry. The Department of Epidemiology will assist the Division of Health Services to (1) review the state of knowledge on the application of different health reporting systems to surveillance of environmental health hazards; (2) review in depth the activities of the current cancer registries in North Carolina and compare these activities to two or three other states known to have well functioning cancer reporting systems, especially those that include data on environmental and occupational exposures; (3) assess the feasibility and costs of developing and implementing a functional comprehensive statewide cancer incidence reporting system; (4) review current data collection instruments and modify them or develop new data collection instruments for acquiring information on environmental and occupational exposures of entrants to the cancer incidence reporting system and (5) prepare a final report which (a) assesses the feasibility and costs and benefits of establishing a functional comprehensive cancer incidence reporting system and limited follow-up system in North Carolina and (b) makes recommendations with respect to establishment of these health data systems. (Shy).

Modification of CDC Health Risk Appraisal Instrument for Blue Collar Workforce The purpose of this project is to modify the CDC Health Risk Appraisal (HRA) instrument for use

with a blue collar workforce. HRA is a process which incorporates computer analysis of an individual's family and personal health history, personal choice behaviors (alcohol and tobacco use, seat belts, exercise levels, etc.) and basic biomedical tasks (blood pressure, cholesterol, pap, proto, etc.). The individual is provided printouts which compare him or her to the average for their age, race, and sex in terms of potential health risk. We are planning to target use of HRA at blue collar worker populations. This project will benefit the School of Public Health and the Department of Epidemiology by providing a means for developing expertise and experience in analyzing problems of critical or special interest to them, with potential for future development. (Shy, James).

PSYCHOSOCIAL EPIDEMIOLOGY

Social and Community Ties as Predictors of Longevity. This project seeks to replicate and extend Berkman and Syme's observation that social and community ties were associated with reduced mortality among residents of Alameda County, California. Such ties may be particularly important for the elderly, who are simultaneously at greater risk of major illness and of loss of social ties.

We are analyzing data collected in the Evans County Cardiovascular and Cerebrovascular Epidemiologic Study, a major investigation conducted by the Department of Epidemiology in collaboration with Dr. Curtis Hames of Evans County, GA. This continuing investigation has been the source of many publications during over 20 years. Vital status follow-up has continued since the last re-examination of the cohort, in 1967. Our analysis will employ measures of marital status, friends and relatives, and church activities obtained in a sociological questionnaire administered in the 1967 examination. We will use survivorship analysis methods to examine the relationship between a social network index and mortality. The index will be constructed to replicate, as nearly as possible, that created by Berkman and Syme. We will also control the analysis for major risk factors, including systolic blood pressure, cigarette smoking, serum cholesterol, presence of clinical cardiovascular disease or diabetes, overweight, physical exercise, and social status. (Schoenbach, Kaplan, Kleinbaum).

The Social Psychological Aspects of a Controlled Clinical Trial to see the Mortality/Morbidity Effectiveness of Behavior Modification on Type A Behavior in Post-MI Patients. In collaboration with the Harold Brunn Institute of Cardiology, Mt. Zion Hospital, San Francisco, CA. A group at Stanford University is also involved. (Kaplan).

OTHER

National Evaluation of Rural Primary Health Care Programs. Faculty members in the Department of Epidemiology, in conjunction with the UNC Health Services Research Center, are conducting a national evaluation of different models of rural primary care delivery. The study, which is supported by the Robert Wood Johnson Foundation, is tied to household survey research being conducted by the Department of Health, Education, and Welfare. Information helpful in health policy formation is being developed by establishing relationships between the characteristics of services in each type of model and the degree of the model's success in meeting specific social and health goals. The study is examining such outcome variables as service cost, service accessibility, consumer perceptions of care and practice stability, as well as several health indicators. (Sheps)

Incidence of Severe Trauma and Burns in North Carolina. The North Carolina Trauma and Burn Study is a record review of current severe injury in the State. All trauma and burn patients entering the Emergency Department of 24 selected hospitals Champion Trauma Scores of 15 or less are eligible for the Study, including deaths. The 12 major hospitals (Level I and II) are in the Study plus a random selection of community hospitals (Level II-III and III) that have 24-hour emergency service, stratified by Health Service Areas in order to represent the entire state.

A two-page questionnaire will be completed on each eligible patient, providing demographic and descriptive information. For burns, an additional one-page description of the percent of the body involved in second and third degree burns will be completed. At the time of discharge, or one-month from admission, whichever comes first, three questions will be

answered: an estimate of the disability, place of disposition and presence of complications with risk of life and/or risk of prolonged hospitalization. The physician who cared for the patient will be asked one question regarding potential use of air transport.

The Study will cover 6 months or approximately 2000 cases of trauma in all, with approximately 300-400 cases in each Health Service Area. (Becker)

Clinical Evaluation of Licensed Multiple Puncture Devices for the Administration of Tuberculin. Under a subcontract with the University of Kentucky, six devices for the delivery of tuberculin skin tests are being compared to the standard Mantoux test in populations in four sites: North Dakota, Kentucky, and Texas. Field work is complete and analysis is in progress. (Becker).

Effectiveness of Self-help Smoking Cessation Strategies. Three promising self-help approaches to smoking cessation, developed during the first year of the project, are being evaluated in a randomized controlled trial among 2,000 enrollees of Group Health Cooperative of Puget Sound, a major health maintenance organization based in Seattle, Washington. (Schoenbach, Brooks, Kaplan, Quade)

A Self-help Quit-Smoking Program for Black Americans. We propose to develop a replicable, mediated self-help smoking cessation intervention oriented toward Black smokers wanting to quit and to test its effectiveness among 2,400 Black individual policyholders of North Carolina Mutual Life Insurance Company (NC Mutual), the largest Black-owned business enterprise in the US. The intervention will feature a new, well-illustrated, easy-to-read quit-smoking manual, incorporating nicotine-fading, nonsmoking skills training, and materials to bolster natural support for quitting. The four-part manual will be presented in four home visits by NC Mutual sales agents, who will receive a short, standardized training session to generate interest and promote participation. Compliance incentives and reinforcements will be employed. A trained quit-smoking counselor will be available by means of an 800-number at NC Mutual to provide needed professional assistance to quitters.

B. Research and Training Funds Received during the Year. [Title; Termination Date (P.I.)]

"A Self-Help Quit Smoking Program for Black Americans", National Cancer Institute; 12/31/88 (Schoenbach).

Business Roundtable: A Study of the Burden of Chronic Illness Related to Occupational Exposures; 10/30/85 (Shy).

Cancer Epidemiology Training. National Cancer Institute; 08/31/85 (Hulka).

Cancer Risk Among Atomic Workers. Oak Ridge Associated Universities; 09/30/84 (Shy).

Cardiovascular Epidemiology and Statistics. National Heart, Lung and Blood Institute; 06/30/85 (Tyroler).

Communities in Chatham County Exposed to Aerial Spraying of Tordon; 03/31/85 (Shy).

Community Surveillance in the Southeastern United States. National Heart, Lung and Blood Institute; 06/30/84 (Tyroler).

Effectiveness of Self-Help Smoking Cessation Strategies; 06/30/86 (Schoenbach).

Geographic and Temporal Variation in Mortality, and Development of Health Indices in Relation to Environmental Quality; 12/31/88 (Tyroler).

Hormone Receptors and Serum Assays in Prostatic Cancer; 8/31/85 (Hulka)

John Henryism and Hypertension Risk: Race and Gender Influences; 11/30/86 (James)

Modification of CDC Health Risk Appraisal Instrument for Blue Collar Workers; 7/15/85 (Shy).

Nonenzymatic Glycosylation of Proteins...(Publication); 6/30/85 (Heiss).

Oak Ridge: Comprehensive Epidemiology of DOE Atomic Workers; 9/30/85 (Shy).

P-Waves in EKGs of 600 Hypertensives Before and After Surgery; 6/30/85 (Logue)

(A) Project to Evaluate Existing and Potentially
New Health Data Reporting Systems in NC;
04/15/85 (Shy).

Pharmaco-Epidemiology Post-Doctoral Fellowship;
9/30/84 (Hulka).

Pilot Evaluation Studies of High Blood Pressure
Control. National Heart, Lung and Blood
Institute; 01/31/85 (Ibrahim).

Predictors of Survival Among MI Patients in
N.C.; 6/30/85 (Johnson, Jeffrey).

Psychosocial Factors Related to Risk and Control
of HBP among Black Men; 6/30/87 (James).

Predictors of IHD in Blacks (Charleston Heart
Study); 12/31/84 (Tyroler).

C. Notable Publications of Faculty.

Shirley Beresford

Beresford SAA: Is nitrate in the drinking water associated with the risk of stomach cancer in the urban U.K.? Int. J. Epid. 14 (1) 57-63, 1985.

Williams, CA, Beresford SAA, James SA, LaCroix AS, Strogatz DC, Wagner EH, Kleinbaum DG, Cutchin LM, Ibrahim MA: The Edgecombe County High Blood Pressure Control Program: III. Social support, social stressors and treatment dropout. Amer. J. Pub. Health. 75 (5) 483-486, 1985.

Harvey Checkoway

Checkoway H, Wilcosky T, Wolf P, Tyroler H: An evaluation of the associations of leukemia and rubber industry solvent exposures. Amer. J. of Industrial Medicine, 5: 239-249, 1984.

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Checkoway H: Identifying Non-Exposed Workers in Occupational Cohort Studies [letter]. Journal of Occupational Medicine 27:240, 1985.

Frome EL, Checkoway H: Use of Poisson Regression Models in Estimating Incidence Rates and Ratios. American Journal of Epidemiology 121:309-323, 1985.

Gerardo Heiss

Greenberg RA, Green PP, Roggenkamp KJ, Barrett-Connor E, Tyroler HA, Heiss G. The constancy of parent offspring similarity of total cholesterol throughout childhood and early adult life. Journal of Chronic Diseases 37(11):833-838, 1984.

Tyroler HA, Knowles MG, Wing SB, Logue EE, Davis CE, Heiss G, Heyden S, Hames CG. Ischemic heart disease risk factors and twenty-year mortality in middle-age Evans County black males. American Heart Journal 108(3) (Part 2):738-746, September, 1984.

Barbara S. Hulka

Clark, LC, Graham, GF, Crouse, RG, Grimson, R., Hulka, BS, Shy, CM: Plasma Selenium and Skin Neoplasms: A Case-Control Study. *Nutrition and Cancer* 6:13-21, 1984.

Fowler, WC, Freeman, AC, Hulka, BS, Kaluzny, AD, O'Keefe, SP, Symons, MJ, Lee, YY: Delays in Cervical Cancer Treatment: An Assessment of Patient and Provider Characteristics. Advances in Cancer Control: Epidemiology and Research, pages 265-274. Alan R. Liss, Inc., New York, N.Y., 1984.

Hulka, BS: Diet and Breast Cancer. In *Proceedings of the 1982 Public Health Nutrition Update. Dietary Excesses and Health/Disease Implications.* (JJB Anderson, Ed.) Health Sciences Consortium, 1984.

Hulka, BS: When is the Evidence for "No Association" Sufficient? (Editorial) *JAMA* 252:81-82, 1984.

Hulka BS, Wheat J. Patterns of Utilization, the Patient Perspective. *Medical Care* 23(5):438-460, 1985.

Marshall, EG, Hulka, BS. Risk Factors for Cervical Cancer. *International Medicine* 5:22-26, 1985.

Michel A. Ibrahim

Ibrahim MA, et al: Community Coverage in Rural, Church-based, Hypertension Screening Program in Edgecombe County, North Carolina. *Am J Public Health* 1985; 75: 401-402.

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Subcommittee on Definition and Prevalence of the 1984 Joint National Committee (Ibrahim MA, Chairman): Hypertension Prevalence and the Status of Awareness, Treatment, and Control in the United States. *Hypertension* May-June 1985; (3): 457-468.

Ibrahim MA: *Epidemiology and Health Policy.* Aspen System Corporation, Baltimore MD 1985.

Sherman A. James

James SA: Coronary heart disease in Black Americans: Suggestions for research on social status, social mobility, and Type A Behavior. Am. Heart J. (Supplement), 1984, 108::833-838.

James SA: Socioeconomic Influences on CHD in Black Populations. American Heart Journal, Supplement, 1984, 108:669-672.

Orr ST, Miller CA, James SA: Differences in use of Health Services by Children According to Race: Relative Importance of Cultural and System-Related Factors. Medical Care, 1985, (in press).

James SA: Psychosocial and Environmental Factors in Black Hypertension. In WD Hall, NB Shulman, and E Saunders (eds.) Hypertension in Blacks: Epidemiology Pathophysiology and Treatment. Year Book Medical Publishers, forthcoming, 1985.

Light K.C., Obrist P.A. and James S.A. "Self-reported Exercise Levels and Cardiovascular Responses During Rest and Stress." Psychophysiology, 1984.

Strogatz D.S., James S.A., Elliot D., Ramsey D., Cutchin L.M., Ibrahim M.A. "Community Coverage in a Rural, Church-Based, Hypertension Screening Program in Edgecombe County, North Carolina" American Journal of Public Health, 1985; 75:401-402.

Kleinbaum D.G., Kupper L.L., Suen Chung-Yi, James S.A. "On Statistical Inferences About Covariate-Adjusted Proportions." In PK Sen (ed.) BIostatistics: Statistics in Biomedical, Public Health and Environmental Sciences, The Bernard G. Greenberg Volume. Elsevier Science Publishers B.V., North Holland, 1985.

James S.A. "Psychosocial Precursors of Hypertension: A Review of the Epidemiological Evidence." Circulation, 1985 (Submitted).

(See Kaplan)

BERTON H. KAPLAN

McLeroy K, DeVellis R, DeVellis B, Kaplan BH, Toole J: Social Support and Physical Recovery in a Stroke Population. Journal of Social and Personal Relationships Vol.1: 395-413, 1984.

Co-author of book chapter in: Kleinman A: Bereavement: Reactions, Consequences and Care. National Academy Press, Washington, DC, 1984.

Kaplan BH, Blazer DG: Psychiatric Epidemiology, A Review in Psychiatry and the Behavioral Sciences. D Hamburg, J Barkus and P Berger, (Eds), Oxford University Press. In press.

(See Schoenbach)

Victor J. Schoenbach

Schoenbach VJ,: Behavior and Lifestyle As Determinants of Health and Well-being in the Elderly. In: Harry T. Phillips and Susan A. Gaylord (eds): Aging: A Public Health Perspective. New York, Springer, 1985, 183-216.

Schoenbach VJ, Garrison CZ, Kaplan BH: Epidemiology of Adolescent Depression. Public Health Reviews 1984; 12:159-189.

Siscovick DS, Weiss, NS, Fletcher RH, Schoenbach VJ, Wagner EH: Habitual vigorous exercise and primary cardiac arrest: effect of other risk factors on the relationship. Journal of Chronic Diseases 1984; 37:625-631.

(See Kaplan)

Carl M. Shy

Clark, L.C., Graham, G.F., Crouse, R.G., Grimson, R., Hulka, B. and Shy, C.M. Plasma Selenium and Skin Neoplasms: A Case-Control Study. Nutrition and Cancer, 6(1):13-21, 1984.

Shy, C.M. Air Pollution and Lung Cancer. Chapter in Lung Cancer: Causes and Prevention. Deerfield Beach, Fla., Verlag Chemie International, Inc., 1984.

Piper, D.W., McIntosh, J.H., Ariotti, D.E., Calogiuri, J.V., Brown, R.W. and Shy, C.M. Life events and chronic duodenal ulcer: a case control study. Gut, 22:1011-1017, 1984.

Herman A. Tyroler

Hypertension Detection and Follow-up Program Cooperative Group. "Effect of Stepped Care Treatment on the Incidence of Myocardial Infarction and Angina Pectoris." Hypertension Supplement I 6(2):1198-1206, March-April, 1984.

Greenberg, R. A., Green, P. P., Roggenkamp, K. J., Barrett-Connor, E., Tyroler, H. A., Heiss, G. "The Constancy of Parent-Offspring Similarity of Total Cholesterol Throughout Childhood and Early Adult Life" Journal of Chronic Diseases 37(11):833-838, 1984.

Wilcosky, T. C., Checkoway, H., Marshall, E. G., Tyroler, H. A. "Cancer Mortality and Solvent Exposures in the Rubber Industry" American Industrial Hygiene Association Journal 45(12):809-811, 1984.

Wing, S., Tyroler, H. A., Manton, K. G. "The Participant Effect: Mortality in a Community-Based Study Compared to Vital Statistics" Journal of Chronic Disease 38(2):135-144, 1985.

Tyroler, H. A., Hames, C. G. "Hypertension and 20-Year Mortality in Black Residents of Evans County, Georgia" In Hypertension in Blacks: Epidemiology, Pathophysiology and Treatment. James D. Ryan, Jr. (Ed.) Year Book Medical Publishers, Inc., Chicago, 1985.

Heyden, S., Borhani, N. O., Tyroler, H. A., Schneider, K. A., Langford, H. G., Hames, C. G., Hutchinson, R., and Oberman, A. "The Relationship of Weight Change to Changes in Blood Pressure, Serum Uric Acid, Cholesterol and Glucose in the Treatment of Hypertension" Journal of Chronic Diseases 38(4):281-288, 1985.

Tyroler, H. A. "Häufigkeit, Schweregrad und Prognose der Hypertonie in Abhängigkeit vom Sozialstatus: Erfahrungen mit der männlichen Kontroll-gruppe des Hypertonie-Früherkennungs- und Folgebehandlungsprogramms (HDFP)" First Workshop on Hypertension, Salzburg, May 1984. Epidemiologic, Prävention und medikamentöse Behandlung der essentiellen Hypertonie, pages 51-61, April, 1985.

(See Checkoway)

(See Heiss)

D. Papers presented by faculty.

Harvey Checkoway

Checkoway H, Crawford-Brown DJ: Metabolic Modeling of Organ-Specific Doses to Carcinogens as Illustrated with Alpha Radiation-Emitting Radionuclides. Presented at the National Cancer Institute Symposium on Time-Related Factors in Cancer Epidemiology, Bethesda, MD, April, 1984.

Hickey JLS, Checkoway H: Worker Classification and the Examination of Workplace Hazards in Occupational Epidemiology. Presented at the American Industrial Hygiene Conference, Las Vegas, Nevada, May, 1985.

Barbara S. Hulka

Hulka, BS: Screening for Cancer: Lessons Learned. Conference on Medical Screening and Biological Monitoring for the Effects of Exposure in the Workplace, Cincinnati, Ohio, July 12, 1984.

Hulka, BS: Patterns of Utilization: The Patient Perspective. The Health Services Research Conference of the National Center for Health Services Research, Savannah, GA, October 16, 1984.

Hulka, BS: Keynote Address at Second Annual Meeting of the Genotoxicity and Environmental Mutagen Society, Durham, N.C., October 19, 1984.

Hulka, BS: Breast Cancer and Exogenous Estrogen" Symposium on Epidemiology and Health Risk Assessment, Johns Hopkins University, Columbia, MD, May 14, 1985.

Michel A. Ibrahim

Ibrahim M.A.: Notes on the contribution of epidemiology to health risk assessment. The Epidemiology and Health Risk Assessment Symposium. Columbia, Maryland, 14 May 1985.

Ibrahim, M.A.: Disgnosis-Related Groups (DRG) and the Epidemiologist. The Society for Epidemiologic Research Annual Meeting. Chapel Hill, NC, 21 June 1985.

Sherman A. James

James, S.A.: "Psychosocial Precursors of Hypertension: Epidemiological Evidence." Presented at the American Heart Association Conference on Behavioral Medicine and Cardiovascular Disease, Sea Island, Georgia, February 3-7, 1985.

James, S.A., Strogatz, D.A., LaCroix, A.Z.: "John Henryism and Blood Pressure Differences Among Black Men: Social Supports and Economic Strain." Presented at the 6th Annual Meeting of the Society of Behavioral Medicine, New Orleans, Louisiana, March 27-30, 1985.

James, S.A.: "The Edgecombe County High Blood Pressure Control Program: A Summary." Presented at the National Conference on High Blood Pressure Control, Chicago, Illinois, April 28-30, 1985.

James, S.A.: (For Paul A. Obrist and Kathleen C. Light): "Psychosocial Correlates of Reactivity in Black and White Male College Students: Preliminary Findings." Presented at the NHLBI Workshop, Bethesda, Maryland, May 31, 1985.

IV. PUBLIC SERVICE

Caroline BeckerDepartment Activities:

Grader, Masters Comprehensive Examination
 Equal Employment Opportunity Officer
 Member, Space Committee
 Member, Faculty Recruitment Committees
 Chair, Seminar Committee

School Activities:University Activities:

Member (1982-1985) and Chair (1984-1985) AAUP
 Committee for Women.

State Activities:

Participant, NC 2000
 Treasurer, American Heart Association, NC
 affiliate.
 Lecturer in Neurology, Bowman-Gray School of
 Medicine,
 Consultant, American Heart Association, North
 Carolina Affiliate, in various research projects
 and standing committees.
 Judge, Governor's Award for Fitness and Health
 in Business and Industry, 1983-1985.

National Activities:

Member, Johns Hopkins University National Alumni
 Schools Committee, 1979- .
 National Secretary-Treasurer, Delta Omega
 Society, 1981- .
 UNC Convenor, Society for Epidemiologic Research
 National Conference, June 18-21, 1985.

Shirley BeresfordDepartment Activities:

Member, Admissions Committee
 Member, Computer Committee
 UNC Epidemiology liason with VA Doctoral
 Training Program

School:

Health Promotion/Disease Prevention - Convenor
 of Fitness and Exercise Reference Panel

University Activities:

Consultant, epidemiological methods, Department
 of Family Medicine

National:

Member, American Public Health Association

International:

Member, International Epidemiological
Association

Harvey Checkoway

Department Activities:

Member, Admissions Committee.
Grader, Doctoral Qualifying Examination
Committee, Master's Exam Committee
Instructor, EPID 162, EPID 276
Teaching Participation, EPID 160, EPID 256, EPID
233
Serve as member of 8-10 doctoral dissertation
committees.

National Activities:

Consultant: Law firm of Milbank, Hadley, Tweed
and McCloy, New York, NY. Scientific critique
of projections of future occurrence of asbestos-
related diseases prepared for unsecured
creditors of Johns Manville Corporation. (1983-
84)

Consultant: National Academy of Sciences,
Institute of Medicine, Washington DC. Review of
Public Health Task Force proposal and conduct of
study of Reye Syndrome and medication use (1983-
85)

Consultant: Research Triangle Institute, Research
Triangle Park, NC. Assistance in the
preparation of scientific proposals including
those for studies of health effects of dioxin
and benzene. (1980-present).

Gerardo Heiss

Department Activities:

Masters Comprehensive Examination Committee
Graduate Studies Committee

School Activities:

SPH Institutional Review Board
SPH HP/DP Cardiovascular Task Force

National Activities:

Data Review Board, B-Scan Assessment
Program.
Clinical Trials Review Committee

International Activities:

Member, Lipid Research Clinics Jerusalem
Steering Committee

Barbara S. Hulka

University Activities:

Member of Research Publications Advisory
Committee, The Graduate School.
Member, Education Policy Committee, UNC
Member, Committee to Review Institutional Grants
of the American Cancer Society, UNC.
Chair, Carolina Population Center Policy Board

National Activities:

Member, Health Services Research & Development
Scientific Review and Evaluation Board of
Veterans' Administration.
Member, Editorial Board for 12th Edition of
Public Health and Preventive Medicine.
Member, Editorial Board, Postgraduate Medicine
Chairperson of the Board of Scientific
Counselors to the National Cancer Institute,
Division of Cancer Prevention and Control.
Member, National Academy of Sciences Committee
on Epidemiology and Veterans Follow-up Studies.
Member, National Advisory Committee on Cancer
Detection, American Cancer Society.
Member, Board of Directors for the North
Carolina Division, American Cancer Society
Member of the Diabetes Control Program
Subcommittee of the National Diabetes Advisory
Board
Participated in the Symposium on Neoplasia in
Rheumatoid Arthritis: an Update on Clinical and
Epidemiological Data, for the Arthritis
Foundation, St. Simons Island, GA
Member of the Breast Cancer Detection
Demonstration Project Analysis and Publication
Committee of the National Cancer Institute
Participated in Site Visit at American Health
Foundation, New York, N.Y., for National Cancer
Institute.
Member of the Preventive Medicine and Public
Health Test Committee of the National Board of
Medical Examiners
Chair of Site Visit to Cambridge Research
Center, Cambridge, MA, for National Institute on
Aging
Participated in Site Visit - University of
Minnesota School of Public Health, Minneapolis,

MN for the Council on Education for Public Health.
Served on Coordinating Subcommittee for Possible Long-Term Health Effects of Short-Term Exposure to Chemical Agents of the National Academy of Sciences

Michel A. Ibrahim

University Activities:

Member, UNC Health Services Research Center Policy Board.

State Activities:

Member, Board of Directors, American Heart Association, North Carolina Affiliate.

National Activities:

Member, Editorial Board, Journal of Rural Health

Member, Aging Review Study Section, National Institute on Aging, July 1983-

Consultant, National Cancer Institute

Consultant, National Institute on Aging.

Consultant, National Heart, Lung and Blood Institute.

Consultant, National Institute of Child Health and Human Development.

Consultant, National Institute on Alcohol Abuse and Alcoholism.

Chairman, Policy Committee for the Five Hypertension Demonstration Projects, NHLBI, 1981-

Editorial Consultant, Journal of Chronic Diseases.

Chairman, Editorial Board, Am. J. of Public Health.

Member, Editorial Advisory Board, Family Medicine Review.

Member, American College of Epidemiology Board of Directors.

International Activities:

Consultant, WHO.

Sherman A. James

Department Activities:

Chairman, Space Committee

Member, Doctoral Qualifying Exam. Comm.

Departmental liaison to School of Public Health's Program in International Health

School Activities:

Member, Dean's Ad Hoc Committee on Health Promotion and Disease Prevention.
Member, Search Committee for Chair of Health Education.
Chair, SPH Graduate Programs Committee, 1984-1986

University Activities:

Member, Advisory Committee to the Chancellor.
Member, Administrative Board of Graduate School.
Member, Advisory Committee, Carolina Black Scholars Program, 1984-

National Activities:

Member, Epidemiology Study Section, NIH.
Member, Planning Committee for the NHLBI Working Conference on CV Disease Risk Factors in Blacks.
Consulting Editor, Behavioral Medicine Abstracts, 1983-1986.

International Activities:

Fellow, First Advanced Seminar in Cardiovascular Disease Epidemiology, Helsinki, Finland.

Berton H. Kaplan

Department Activities:

Deputy Chair for Academic Affairs, 1985-
Chairman, Graduate Studies Committee, 1984-
Grader, Doctoral Qualifying Examination.

School Activities:

Member, Academic Promotions and Appointments Committee, 1982-
Member, Aging Search Committee

University Activities:

Chairman, Chancellor's Committee on Established Lectures, 1983-85.
Advisor on Provost's Committee - University Extension.

National Activities:

Grants Advisor to the William T. Grant Foundation.

Member, Editorial Boards:

Journal of Human Stress

Journal of Behavioral Medicine

Book Review Editor, Journal of Human Stress

Reviewer, American Journal of Epidemiology
Social Forces.

Member of the Psychosocial Advisory Group to the American Cancer Society.
National Science Foundation Grant Advisor, 1980-Fellow, Society of Behavioral Medicine.

Victor J. Schoenbach

Department Activities:

Ad hoc space committee, June 1984
Member, Graduate Studies Committee, November 1982
Masters Examination Committee, January 1982 - (Chairman, January 1982 - July 1984)
Faculty Coordinator of Departmental Technical Sessions for SPH Alumni Conference, December 1983 -
Computer Committee (COMCOM), 1984 - (Chair)
Space Committee, 1984-

School Activities:

CADPAC Committee, September 1983 -
Lecture in SPH Alumni Conference Technical Session on "Translating Science to Social Action in Health Promotion and Disease Prevention", March 29, 1984.

State Activities:

1984 Aid Association for Lutherans, Appleton, Wisconsin -Consultant on health promotion programming.
1984 WRAL-TV, Channel 5, Raleigh NC -- Panelist on "Pro & Con: Tobacco and Health II".
Chairman, Transportation Advisory Board, Town of Carrboro, N.C.. 1980-1984

National Activities:

Member, Standing Review Committee, Health Services Research and Development Field Program, Veterans Administration Medical Center, Durham, NC.
Consultant, Health Promotion/Disease Prevention Program, W.K. Kellogg Foundation (Through Health Services Research Center).
American College of Epidemiology (1983-), Member of Task Force for Statistics Questions of Committee on Examination (1984-)

Carl M. Shy

Department Activities:

Member, Admissions Committee.
Grader, Doctoral Qualifying Examination.
Instructor, EPID 160, EPID 276

School Activities:

Member, Biomedical Sciences Research Support Grant Committee.

Member, Implementation Committee Curriculum in Public Health Nursing

Member, Search Committee PHNU Chair of Curriculum

National Activities:

Member, Board of Scientific Counselors. Division of Cancer Cause and Prevention, National Cancer Institute.

Member, Clinic Hazards Advisory Panel on Asbestos, Consumer Product Safety Commission.

Chairman, Site Visit Committee to the Environmental Epidemiology Branch, National Cancer Institute.

Herman A. Tyroler

Short Courses:

Minnesota Summer Institute, Cardiovascular Disease Epidemiology.

USA-Federal Republic of Germany Training Seminar in Epidemiology and Biostatistics, West Germany

Department Activities:

Chairman, Admissions Committee.

Grader, Doctoral Qualifying Examination.

School Activities:

Member, Occupational Safety and Health Education Resource Center Planning and Executive Committee.

Member, Greenberg Prize Committee

University Activities:

UNC Self-Study: Member, Task Group IV "Assessing the Quality of Research

State Activities:

Member, High Blood Pressure Committee, North Carolina Heart Association.

North Carolina 2000, Commission on the Future of North Carolina.

National Activities:

National Academy of Science; Member, Institute of Medicine; Member, Committee on Planning Study for an Ongoing Study of Costs of Environment-Related Health Effects.

Consultant, National Heart, Lung, and Blood

Institute, Department of HHS for Lipid Research
Clinics Program, Hypertension Detection and
Follow-up Program, Multiple Risk Factors
Intervention Trials, Systolic Hypertension in
the Elderly Program.
Chairman, American Heart Association, Council on
Epidemiology.
Member, National Institutes of Health
Epidemiology and Disease Control Study Section.
National Institutes of Health Workshops:
"Quality of Life in Clinical Trials of
Cardiovascular Therapies" Bethesda, Maryland,
June 1983.
"Coronary Heart Disease in Black Populations"
Bethesda, Maryland, September 1983.
"Measuring Psychosocial Variables" Galveston,
Texas, December 1983.
"Strategies for Minimizing Coronary Heart
Disease in Black Populations" Bethesda,
Maryland, February 1984
"Research Developments in Mild Hypertension"
Bethesda, Maryland, May, 1984.

International Activities:

Steering Committee Member, Arteriosclerosis: US-
USSR, US-Israel, US-Poland, US-Germany.
Consultant, World Health Organization-
International Agency on Research of Cancer.

8-11/85

V. FACULTY

A. List of Faculty [* indicates primary of multiple academic apts.]

1. Full-Time Faculty

- ✓ Caroline Becker
Associate Professor
- ✓ Shirley A.A. Beresford
Assistant Professor
- ✓ Harvey Checkoway
Research Assistant Professor
- John T. Fulton
Professor Emeritus
- ✓ Gerardo Heiss
Associate Professor
- ✓ Barbara S. Hulka
*Professor & Chairperson, EPID
Clinical Assoc. Prof., Family Medicine
Adjunct Professor of Community and Family
Medicine, Duke University Medical Center
- ✓ Michel A. Ibrahim
DEAN, School of Public Health
*Professor, Epid.
Professor, Soc. & Admin. Med.
- ✓ Sherman A. James
*Professor, Epidemiology
Clinical Professor, Psychology.
- ✓ Berton H. Kaplan
Professor
- ✓ David G. Kleinbaum
Professor of Biostatistics
- ✓ Victor J. Schoenbach
Assistant Professor
- ✓ Cecil G. Sheps (Emeritus)
Professor, Epid.
*Professor, Soc. & Admin. Med.
- ✓ Carl M. Shy
*Professor, Epid.
Professor, Envir. Sci. & Engineer.
Clinical Professor, Fam. Med.
- ✓ Herman A. Tyroler
Alumni Distinguished Professor
- ✓ David Weber
*Assistant Professor, Medicine
Assistant Professor, Epid.

2. Part-Time Faculty

- ✓ Naima AbdElghany
Lecturer
- ✓ Gory (Bud) J. Love
Research Associate Professor

3. Visiting Faculty

Saga Johansson
 Visiting Assistant Professor (End of
 appointment 7-31-85)
 Miguel Porta
 Visiting Instructor
 Jane Third
 *Visiting Clinical Associate Professor of
 Epidemiology
 Visiting Clinical Associate Professor of
 Medicine

4. Adjunct and Fixed-Term Joint Appointments

✓ Dragana Andjelkovich
 Adjunct Associate Professor, Epid.
 ✓ Brian A. Boehlecke
 Clinical Associate Professor
 ✓ Joan Cornoni-Huntley
 Adjunct Associate Professor
 John R. Crouse
 Adjunct Associate Professor
 ✓ Lawrence M. Cutchin
 Clinical Associate Professor, Epid.
 Clin. Assoc. Prof., Med. & Fam. Med.
 *Adjunct Assoc. Prof., Soc. & Admin. Med.
 ✓ Gordon H. DeFriese
 Clinical Professor, Epid.
 *Professor, Social & Admin. Med.
 ✓ Bruce Duncan
 Adjunct Assistant Professor
 ✓ Robert H. Fletcher
 Clinical Professor, Epid.
 *Professor, Medicine
 ✓ Suzanne W. Fletcher
 Clinical Professor, Epid.
 *Professor, Medicine
 ✓ H. Hugh Fudenberg
 Adjunct Professor
 ✓ Richard C. Graves
 Research Associate Professor
 ✓ Raymond S. Greenberg
 Adjunct Assistant Professor
 ✓ Seymour Grufferman
 Adjunct Associate Professor
 ✓ Kathryn Magruder-Habib
 Adjunct Assistant Professor
 ✓ Curtis G. Hames
 Clinical Professor
 ✓ Carl G. Hayes
 Adjunct Associate Professor

- ✓ Donald Hayes
Adjunct Professor
- ✓ Siegfried H. Heyden
Adjunct Professor
- ✓ Frank J. Hielema
Adjunct Instructor
- ✓ James E. Higgins
Adjunct Assistant Professor
- ✓ John Higginson
Research Professor, Epid.
*Research Professor, Pathology
- ✓ Michael Hogan
Adjunct Assistant Professor
- ✓ Richard J. Levine
Adjunct Associate Professor
- ✓ Clarence C. Lushbaugh
Adjunct Professor
- ✓ J. Newton MacCormack
Adjunct Associate Professor
- ✓ Eugene S. Mayer
Adjunct Professor, Epid.
*Professor, Fam. Med. & Med.
Director, AHEC
- ✓ Melinda S. Meade
Adjunct Associate Professor, Epid.
*Associate Professor, Geography
- ✓ George R. Parkerson
Adjunct Associate Professor
- ✓ Donald L. Patrick
Adjunct Associate Professor
*Associate Professor, Soc. & Admin. Med.
- ✓ Sheldon M. Retchin
Clinical Assistant Professor, Epid.
*Assistant Professor, Med.
- ✓ Walter J. Rogan
Adjunct Assistant Professor
- ✓ Michael Rosenberg
Adjunct Assistant Professor
- ✓ Desmond K. Runyan
Clinical Assistant Professor
- ✓ Dale Sandler
Adjunct Assistant Professor
- ✓ Robert S. Sandler
Clinical Assistant Professor Epid.
*Assistant Professor, Med.
- ✓ David S. Siscovick
Clinical Assistant Professor, Epid.
*Assistant Professor, Med.
- ✓ Allan H. Smith
*Adjunct Associate Professor
- ✓ C. Gregory Smith
Adjunct Assistant Professor

- ✓ John Stamm
Adjunct Professor
- ✓ Michael R. Swift
Clinical Professor, Epid.
*Professor, Med.
- ✓ Hugh H. Tilson
Adjunct Professor
- ✓ Ramon Velez
Adjunct Assistant Professor
- ✓ Edward H. Wagner
Clinical Professor
- ✓ Allen J. Wilcox
*Adjunct Associate Professor
- ✓ Bonnie C. Yankaskas
Adjunct Assistant Professor, Epid,
*Research Assist. Prof., Radiology

B. Changes During the Year.

1. Additions, effective 1984-1985

- ✓ Donald Hayes, Adj. Prof., effective 10/01/84
- ✓ Suzanne G. Haynes, Adj. Assoc. Prof.,
effective 01/01/85
- Michael Rosenberg, Adj. Assist. Prof.,
effective 1/01/85
- Dale Sandler, Adj. Assist. Prof., effective
10-01-84
- John W. Stamm, Adj. Prof., Prof., School of
Dentistry effective 12/1/84
- ✓ David Strogatz Res. Assist. Prof., effective
6/03/85
- David Weber, Assist. Prof., Dept. of Medicine
and Dept. of Epid., effective 1/15/85

2. Promotions, Effective 1983-1984.

Sherman James, Professor, effective 1/1/85
Allen Wilcox, Adjunct Associate Professor
effective 10/1/84

3. Changes in Rank:

Shirley A.A. Beresford, Assist.Prof.,
effective 9/1/84
Victor J. Schoenbach, Assistant Prof.,
effective 9/1/84

4. Leaves:

None

5. Losses: Retirement, Resignation, Death.

Stephen Gehlbach, Adj. Assoc. Prof.
(Resigned 9/15/84)

Suzanne G. Haynes, Res. Assist. Prof.
(Resigned 12-31-84)

1 C. Proposed Additions:

1 Position at the rank of Assistant Professor
in Cancer Epidemiology to be effective
prior to June 30, 1986.

1 Position at the rank of Assistant Professor
in Aging, effective prior to June 30,
1986.

1 Position at the rank of Assistant Professor
in Reproductive Epidemiology, effective
prior to December 1, 1985.

D. Special Achievements by Faculty-Honors, Awards,
Etc.

Curtis G. Hames: Was awarded from the MacArthur Foundation a \$292,000 research grant. The money, to be disbursed over a five-year period, will be used to help develop a teaching curriculum for medical students. It is to embody the research principles and data Dr. Hames has worked out while practicing medicine in Claxton, Ga.

E. Special Assignments of Faculty.

Berton Kaplan

Deputy Chairman for Academic Affairs

VI. SPECIAL PLANS, PROBLEMS, DEPARTMENTAL DISTINCTIONS, DEVELOPING TRENDS, AND OTHER MATTERS OF IMPORTANCE.

The 1984-85 year was the second year under the leadership of Dr. Barbara Hulka, Chairperson. The primary goal was to complete recruitment of new faculty to replace faculty lost through resignation or death and to build existing programs in cardiovascular disease epidemiology, cancer epidemiology, and health services research. Recruitment efforts have been successful in the health services research and cardiovascular disease epidemiology programs, but the search for a cancer epidemiologist will continue in 1985-86. Recruitment efforts are being finalized with the Carolina Population Center for a new faculty member to head up a new program in Reproductive Epidemiology. In addition, recruitment efforts have begun for a new faculty member in Aging.