

DEPARTMENT OF EPIDEMIOLOGY

ANNUAL REPORT

1978 - 1979

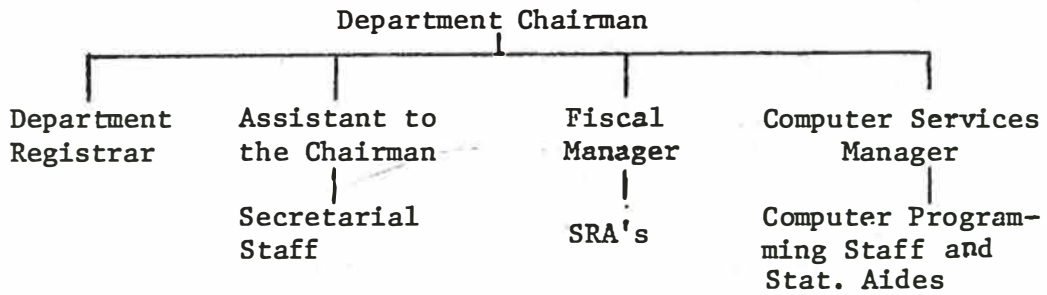
I. DEPARTMENT ORGANIZATION AND ADMINISTRATION

- A. The department is administered by the Chairman, assisted by the following committees:
1. Admission Committee, made up of directors of programs within the department, or their representatives. The Admission Committee screens all applicants, evaluates the strengths and weaknesses of each, and ranks applicants who are acceptable in order of priority. The Committee submits recommendation to the Chairman, who makes the final recommendation to the Graduate School for their approval.
 2. The Committee of Full Professors meets at regular intervals to review all faculty in the department. Recruitments and promotions are discussed in this committee which functions as advisory to the Chairman. Other matters of extreme importance to the department are also taken up by this committee.
 3. The Recruitment Committee has been established this year as an instrument in complying with the new Equal Employment Opportunity and Affirmative Action documentation regulations. The standing committee members include two regular faculty members (one being the Department's Equal Employment Opportunity Officer) and the Assistant to the Chairman. It is chaired by the Department Chairman. The "Floating" members are those faculty or administrative personnel directly involved in the recruitment process of the particular position.
 4. Seminar Committee, chaired by a faculty member, invites suggestions for speakers from all faculty and students. The chairman of the committee invites these speakers and organizes the seminar schedule for each semester. Seminar activities are evaluated at the end of each semester by the entire faculty, with participation from students.
 5. General Faculty Meetings. The entire departmental faculty meets at regular intervals (about once a month) to discuss curriculum, research, and other matters of importance to the department. These meetings are open to all students in the department, and is usually attended by a representative.

6. The general faculty meets once a year for at least one day, away from the University premises, to discuss curriculum, research, service activities, and all matters related to faculty development and career plans.

- B. The Administrative Staff has been re-organized during the past year as shown below:

Department of Epidemiology
Administrative Staff
Organizational Chart



II. INSTRUCTIONAL PROGRAMS

A. Courses and Curricula

1. Major changes during the year.

New Courses-

- EPID 249 Genetics of Common Disease (3).
- EPID 250 Health Problems of Black Americans:
A Social Perspective (3).
- EPID 256 Cardiovascular Disease Epidemiology (3).

Major Changes-

EPID 268 has been revised in content and format. Materials used in the course are now drawn from preliminary drafts of chapters of a new book in progress, and a discussion lab has been introduced.

A year-long seminar series on the Epidemiology of Depression has been developed.

2. New programs being planned or deletions made.

A new topic in Problems in Epidemiology (EPID 141), "Women's Health: An Epidemiological Analysis," is being developed to be added to the regular course curriculum.

The core course offered by the Department, EPID 160, will be expanded next year to incorporate materials previously covered by the course BIOS 103, "Management of Public Health Data," which is being deleted from the Biostatistics curriculum.

3. Honors programs or special courses.

None

4. Participation in interdepartmental or interinstitutional programs.

Educational programs with the Department of Environmental Sciences and Engineering (Environmental Health program in which Drs. Tyroler and Shy participate), the Mental Health Program with Biostatistics (in which

Dr. Kaplan and Dr. James participate), Cardiovascular Disease Epidemiology with Biostatistics (in which Dr. Tyroler and others are involved), and the Drinking Water and Cancer Program with Environmental Sciences and Engineering (Dr. Ibrahim is co-investigator).

M.D./M.P.H. Program in collaboration with the School of Medicine (Dr. Wagner is the liaison from our Department).

Off-Campus Program, Fayetteville. Master's Program HADM course, (taught by Drs. Wagner and Patrick).

B. Enrollment

1. Number of graduate students by:

a. Degree

Ph.D.	23
M.P.H.	10
M.S.P.H.	12

b. Minority Classification

Black Male	3
Black Female	0
White Male	28
White Female	12
Foreign Male	2
Foreign Female	0

c. In-State Residency 24

d. Out-of-State Residency (within U.S.) 19

e. Foreign 2

2. Number of degrees awarded:

a. August 1978 b. December 1978 c. May 1979

PhD	1	PhD	6	PhD	1
MPH	8	MPH	0	MPH	1
MSPH	4	MSPH	0	MSPH	1

3. Comments on the quality of students, their career plans and special achievements.

The Quality of students in the department is extremely high. Many of them are professional people who have had successful careers before coming to the department for further study. All have demonstrated their exceptional ability in both study and research before coming to the department, and they maintain that standard throughout their enrollment. GRE quantitative scores are above the 70 percentile for those with advanced degrees and above the 80 percentile for those without.

4. Apparent trends in job placement of graduates.

From the calls and letters we receive, our students are in particular demand, and the opportunities are many. In most instances, our graduates can choose the setting they desire, be it postdoctoral study or a career.

5. Minority student enrollment efforts.

We continue to encourage minority individuals to apply for consideration for admission to the Department. By word of mouth and at specific meetings, we acquaint prospective students with the field of epidemiology and with the process and criteria of admission. We have been moderately successful this year in offering admission to three minority students who possess good credentials for becoming future epidemiologists.

6. List several of the most significant achievements of majors.

Victor Schoenbach was named to Delta Omega.

In recognition of Dr. Allen Wilcox's outstanding dissertation, the Department has nominated him for two awards, the Sigma Xi award for an outstanding dissertation, and the Delta Omega Merit Award.

Ulrich Keil prepared an overview brochure for the Occupational Health Studies Group (Printed September, 1978).

PUBLICATIONS:

Struba, R.J. "International Short Wave Radio Broadcast Monitoring" Agora, UNC International Center Publication, April 1979.

Struba, R.J. and Keil, U. "Trinkwasserbeschaffenheit und Beziehungen zu Krebs und Kardiovaskularen Krankheiten." Geojournal, in press.

Shy, C.M. and Struba, R.J. "Air and Water Pollution," In Cancer Epidemiology and Prevention, David Schottenfeld and Joseph Fraumeni, eds., W.B. Saunders Co., April 1979, In press.

Keil, U., and Struba, R.J. "Epidemiologie in der Arbeitsmedizin," Arztliche Praxis, 1979, In press.

Christiansen, K., Kornicki, D., and Struba, R.J. "Radiation Hygiene" Dental Hygiene, 1979, in press.

Frentzel Beyme R., Keil, U., Struba, R.J., Pflanz, M., and Wagner, G. "Die Bedeutung der Informationen auf den Totenschein für Epidemiologie und Öffentliches Gesundheitswesen," Das Öffentliche Gesundheitswesen, 1979, In press.

Struba, R.J. "The location of likely high density radio frequency exposure zones in metropolitan areas using computergraphic techniques," Presented at the International Management Systems Conference, Honolulu, Hawaii, 1979.

Struba, R.J. and Shy, C.M. "Drinking Water Quality and G.I. Cancer, A Case-Control Approach." Paper for presentation at the Society for Epidemiology Research, New Haven, Connecticut, June 1979.

Shy, C.M., Kleinbaum, D., and Morgenstern, H. "Effect of Misclassification of Exposure Status in Epidemiological Studies of Air Pollution-Health Effects. Bulletin of the New York Academy of Medicine 54: 1155-1165, 1978.

James, S.A., Dreyer, N., Woods, N., ISRO "A Valid Scale for Sex Role Orientation." Sex Roles: A Journal for Research. In press.

C. Teaching Load of Faculty

1978 1st Summer Session

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Andjelkovich	EPID 140	Problems in Epidemiology	1	1						3
Becker	EPID 140	Problems in Epidemiology	1	1						3
Beaglehole	EPID 140	Problems in Epidemiology	1	1						3
Heiss	EPID 140	Problems in Epidemiology	2	2						3
Hulka	EPID 140	Problems in Epidemiology	1	1						3
Ibrahim	EPID 393	Thesis	2	2						Varies
	EPID 394	Dissertation	1	1						3
James	EPID 393	Thesis	1	1						3
	EPID 394	Dissertation	2	2						Varies
Kaplan	EPID 140	Problems in Epidemiology	2	2						Varies
	EPID 360	Research in Epidemiology	1	1						3
	EPID 393	Thesis	1	1						3
	EPID 394	Dissertation	1	1						0
Omran	EPID 393	Thesis	1	1						3
	EPID 394	Dissertation	1	1						3
Patrick	EPID 265	History of Epidemiology	1	1						3

Teaching Load of Faculty (Continued)

1978 2nd Summer Session (Con't).

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>					<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	
James	EPID 141	Problems in Epidemiology	2	2					3
	EPID 394	Dissertation	2	2					Varies
Kaplin	EPID 141	Problems in Epidemiology	1	1					3
	EPID 361	Research in Epidemiology	1	1					3
	EPID 393	Thesis	1	1					3
	EPID 394	Dissertation	1	1					0
Omran	EPID 394	Dissertation	1	1					3
Shy	EPID 141	Problems in Epidemiology	2	2					3
	EPID 394	Dissertation	3	3					Varies
Slome	EPID 141	Problems in Epidemiology	2	2					Varies
	EPID 393	Thesis	1	1					3
Tyroler	EPID 141	Problems in Epidemiology	2	2					Varies
	EPID 393	Thesis	1	1					1
Wagner	EPID 393	Thesis	2	2					3
	EPID 394	Dissertation	1	1					3

Teaching Load of Faculty (Continued)

1978 1st Summer Session (Cont'd)

<u>INSTRUCTOR</u>	<u>NUMBER</u>	<u>COURSE NAME</u>	<u>ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Shy	EPID 140	Problems in Epidemiology	1	1						3
	EPID 276	Adv. Envr. Epidemiology	2	2						3
	EPID 315	Fld. Training in Epidemiology	1							
	EPID 393	Thesis	1	1						0
	EPID 394	Dissertation	3	3						Varies
Slome	EPID 140	Problems in Epidemiology	1	1						3
	EPID 393	Thesis	3	3						Varies
Tyroler	EPID 140	Problems in Epidemiology	2	2						Varies
	EPID 315	Fld. Training in Epidemiology	5	5						Varies
	EPID 393	Thesis	1	1						3
Wagner	EPID 315	Fld. Training in Epidemiology								

1978 2nd Summer Session

Andjelkovich	EPID 141	Problems in Epidemiology	1	1						3
	EPID 361	Research in Epidemiology	1	1						3
Heiss	EPID 394	Dissertation	1	1						3
Ibrahim	EPID 393	Thesis	1	1						3
	EPID 394	Dissertation	2	2						Varies

Teaching Load of Faculty (Continued)

Fall 1978

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Andjelkovich	EPID 140	Problems in Epidemiology	3	3						Varies
	EPID 360	Research in Epidemiology	1	1						2
	EPID 394	Dissertation	2	2						Varies
Becker	EPID140	Problems in Epidemiology	2	2						Varies
	EPID 160-1	Principles of Epidemiology (Shared responsibility. See Omran)								
	EPID 211	Determ. of Com. Dis.	7	7						2
Heiss	EPID 160-2	Principles of Epidemiology (Shared)	33	31	1				1	3
	EPID 256	Cardiovascular Dis. Epid (Shared)	20	20						3
Ibrahim	EPID 160-2	Principles of Epidemiology (Shared)	33	31	1				1	3
	EPID 394	Dissertation	2	2						Varies
James	EPID 160-1	Principles of Epidemiology (Shared Responsibility. See Omran)								
	EPID 360	Research in Epidemiology	1	1						3
	EPID 394	Dissertation	1	1						9
Kaplan	EPID 140	Problems in Epidemiology	2	2						Varies
	EPID 160-1	Principles in Epidemiology (Shared responsibility. See Omran)								
	EPID 360	Research in Epidemiology	4	4						Varies
	EPID 394	Dissertation	1	1						4
Omran	EPID 160-1	Principles of Epidemiology	203	156	6	26	2	9	4	3
	EPID 140	Problems in Epidemiology	5	5						4
	EPID 161	Epid. Pop. Dy. Fam. Plan.	28	24			2	2		1
	EPID 234	Research Design Epidemiology	12	12						2
	EPID 293	Major Paper	1	1						3
	EPID 394	Dissertation	1	1						0

Teaching Load of Faculty (continued)

Fall 1978 (Cont'd).

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Patrick	EPID 140	Problems in Epidemiology	1	1						2
	EPID 160-1	Principles of Epidemiology (Shared responsibility. See Omran)								
	EPID 160	Principles of Epidemiology (Off-Campus)	17					17(EGW)		3
Shy	EPID 140	Problems in Epidemiology	1	1						6
	EPID 360	Research in Epidemiology	3	3						Varies
	EPID 392	Major Paper	2	2						Varies
	EPID 394	Dissertation	1	1						0
Tyroler	EPID 140	Problems in Epidemiology	5	5						Varies
	EPID 160-2	Principles of Epidemiology (shared)	33	31	1			1		3
	EPID 256	Cardiovascular Dis. Epid.(shared)	20	20						3
	EPID 394	Dissertation	3	3						Varies
Wagner	EPID 140	Problems in Epidemiology	1	1						3
	EPID 394	Dissertation	2	2						Varies
Williams	EPID 160-1	Principles of Epidemiology (Shared responsibility. See Omran)								
Beaglehole	EPID 140	Problems in Epidemiology	2	2						3
Gehlbach	EPID 140	Problems in Epidemiology	1	1						2

Teaching Load of Faculty (continued)

Spring 1979

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Andjelkovich	EPID 141	Problems in Epidemiology	3	3						Varies
	EPID 394	Dissertation	2	2						Varies
Gehlbach	EPID 141	Problems in Epidemiology	1	1						2
Heiss	EPID 266	Epid. Investigation (shared)	2	2						3
	EPID 361	Research in Epidemiology	1	1						3
	EPID 392	Major Paper	1	1						4
Ibrahim	EPID 368	Epid. Basis/Comm. Hlth.	19	19						2
	EPID 394	Dissertation	2	2						Varies
James	EPID 141	Problems in Epidemiology	1	1						2
	EPID 250	Soc. Epid. Black Hlth.	12	11	1					3
	EPID 392	Major Paper	1	1						3
Kaplan	EPID 264	Culture and Health	16	13				2	1	3
	EPID 361	Research in Epidemiology	3	3						Varies
	EPID 392	Major Paper	1	1						2
	EPID 394	Dissertation	2	2						Varies
Kleinbaum (Bios)	EPID 268	Adv. Meth. in Epid. (Shared)	33	31	1			1		3
	EPID 361	Research in Epidemiology	1	1						3
	EPID 141	Problems in Epidemiology	1	1						4

Teaching Load of Faculty (Continued)

Spring 1979 (Cont'd)

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>CREDIT HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Omran	EPID 251	Epid. Meth./Pop. Res.	8	7				1	3	
	EPID 394	Dissertation	1	1					0	
Patrick	EPID 262	Epid. of Prog. Accept.	9	7	2				2	
Rudnick	EPID 141-3	Problems in Epidemiology	8	8					Varies	
Shy	EPID 141	Problems in Epidemiology	5	5					Varies	
	EPID 162	Epid/Envr/Occup. Health	74	57	4	7		6	3	
	EPID 361	Research in Epidemiology	6	5	1				Varies	
	EPID 392	Major Paper	1	1					4	
	EPID 394	Dissertation	3	3					Varies	
Tyroler	EPID 141	Problems in Epidemiology	5	5					Varies	
	EPID 266	Epid. Investigation (Shared)	2	2					3	
	EPID 394	Dissertation	1	1					9	
Wagner	EPID 141	Problems in Epidemiology	1	1					3	
	EPID 268	Adv. Meth. in Epid. (Shared)	33	31	1			1	3	
	EPID 370	Clin.Epid./Prim. Care	3	3					2	
Williams	EPID 141	Problems in Epidemiology	5	5					2	

Teaching Load of Faculty (Continued)

Non-Epidemiology Courses

<u>INSTRUCTOR</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>TOTAL ENROLLED</u>	<u>ENROLLMENT BREAKDOWN</u>						<u>LECTURE HOURS</u>
				<u>PHO</u>	<u>EC</u>	<u>HU</u>	<u>AS</u>	<u>GRO</u>	<u>OTHER</u>	
Wagner	Off-Campus	Health Administration	30	30						3
	Med.Sch.	Medicine & Society	80					80 (Med)		3
	Med.Sch.	Medicine & Society	14					14 (Med)		28
	MEDI 418	Clin. Pharm.	4					4 (Med)		6
	Med.Sch.	Physical Diagnosis	7					7 (Med)		36
	Nurs.Sch.	Family Nurse Practitioner	22					22 (Nur)		6
James	HEED 250	Research Methods in Hlth.Ed.	6	6						2.5
	MHCH 300	Research in Maternal & Chd.Hlth.	5	5						2.5
Kaplan	MHCH 310	Seminar, Current issues in Womens Health	40	40						3
	NUTR 211	Behavioral Aspects of Nutrition	30	30						2

III. RESEARCH PROGRAMS

A. Most important research projects during the year.

CANCER

Assessment of Past Diet in Cancer Epidemiology. This study is designed to establish the reliability of a retrospective dietary history. The instruments have been developed and the pretest completed for both current and retrospective dietary instruments.

Effects of Occupational Exposure and Reproduction Functions Among Female Workers. General health status and reproductive patterns information, on about 250 female production workers in a small plant in Indiana, was collected and partially analyzed. The study has not yet been completed due to some difficulties in getting permission to interview workers in another plant, selected as the comparison group.

Endometrial Cancer and Use of Exogenous Estrogen. Epidemiologic and laboratory data suggest that the use of estrogen by women during or after menopause may have a carcinogenic effect. A case-referent study has been designed to determine whether or not this association exists in North Carolina. Cases and referent women have been identified from medical records at North Carolina Memorial Hospital. A third set of referent women was obtained from a community sample. Interviews with the patients and record abstracting from their physicians' offices supplied additional data. Preliminary data suggest an overall two-fold excess risk of endometrial cancer with estrogen use. The risk ratios vary greatly for different patient subsets.

Initiation of Water Quality and Colon Cancer Case Control. This project will initiate a case-control epidemiological investigation of the relationship between drinking water quality and colon cancer in North Carolina by identifying and recruiting 300 colon cancer cases and an equal number of control persons from hospital records in North Carolina. In order to do this, a number of approaches to such case findings will be evaluated and discussed in a final report.

Leukemia Among Rubber Workers. The main objective of this case-control study was to investigate further the hypothesis that workers in jobs involving exposure to solvents were at increased risk of developing leukemia. From four plants (each from a different rubber manufacturing company) a total of 348 subjects were included in this study, of whom 72 were leukemia deaths and 268 controls matched on several variables. Findings from an earlier study within

one company of an association of lymphatic leukemia with solvent exposure jobs were confirmed for the subjects from the same company. However, this association was not present in the other three companies studied which might be due to the possible differential solvent use between the companies.

Lung Cancer Among Rubber Workers. In order to evaluate the relationship between lung cancer mortality and specific exposure, case-control studies were conducted at two rubber manufacturing plants (Plants A and B) in the same company. The number of lung cancer cases in Plant A was 130, and in Plant B was 27, while the number of controls were 500 and 54 respectively. Findings are suggestive of an association between elevated risk for lung cancer and a history of employment in certain work areas of the two plants. Further epidemiologic and environmental research is underway to identify specific respiratory system hazards, if any, in work areas identified in the present study.

Mortality of Female Workers. In an earlier study of female production workers in a rubber manufacturing plant, the all-causes standardized mortality ratio was 103 for the entire cohort of over 1600 workers, based on the age-sex-race comparable U.S. population as a standard. Cause specific analysis showed excesses of deaths due to lung cancer and myocardial infarction, while deficit of deaths from breast cancer was observed in the same cohort. An attempt was made to replicate this study in some other rubber manufacturing plants. Due to the lack of information on the total population at risk, proportional mortality analysis are being carried out in other plants.

Occupational Health Studies Among Rubber Workers Including Case-Control Studies of Occupational Exposures and Cancer. Bladder Cancer Study-completed. Leukemia Study-near completion, Prostate Cancer Study-completed. Stomach Cancer study-near completion.

Pesticide Usage and Cancer Mortality. Total cancer and lung cancer mortality, adjusted for socio-demographic factors, was significantly associated with several indices of agricultural activity in 5 southern states of the U.S.

Research and Development. A Health Surveillance System for Industry. A large project, with research going on in several facets. A study looking for hematological effects of work in synthetic rubber plants; data analysis stage.

Stomach Cancer in the Rubber Industry. This study utilized a matched case-control design with two sets of two controls (for a total of four)- the first set matched on age, race,

and sex and the second matched on these factors, and on duration of employment as well. In all, there were 102 cases of stomach cancer and 393 controls, with subjects from both sex and race groups included in the study. Results of this study revealed that cases at one company had significantly different work histories from controls, and this difference involved a history of employment within some work areas judged to have substantial exposure to talc which might have been in the past contaminated with asbestos.

CARDIOVASCULAR

Analysis of the Prognostic Value of Transient Cerebrovascular Ischemia for Total Mortality in a Community Setting. Study at analysis stage.

Effects of Contraceptive Steroids on Blood Pressure. National Institute of Child Health and Human Development. One thousand women attending Family Planning Clinics in six counties of southeastern Georgia have been enrolled in an incidence study to determine the effect of oral contraceptives on blood pressure. More than sixty percent have been followed at least once during the first 2 years and there is no indication of a rise in the mean diastolic blood pressure.

Evans County Cardiovascular Studies. Effect of Coffee Consumption on Mortality. Assessment of the potential hazards of coffee consumption on mortality in a community.

Evans County Cardiovascular Studies. Predictors of Blood Pressure Elevation. This study involves a sixteen-year follow-up of adolescents normotensive at intake, pertaining to the original Evans County cohort. The study focuses on predictors of blood pressure elevation in young adulthood, and early sequels of high blood pressure.

Hypertension Control in Shelby, NC. Hypertension Detection and follow-up program. A large multicenter community intervention trial of the efficacy of treating mild to moderate hypertension. Major findings are that it is possible to screen, detect, and successfully manage the reduction of elevated blood pressure in the vast majority of instances found in free-living populations.

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 prevention trial. Study results to date include population based distributions of lipids and lipoprotein-cholesterol fractions, and the effect 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).

Pilot Evaluation Studies of High Blood Pressure Control.

This is a new project consisting of a series of pilot evaluation studies of high blood pressure control in a rural community (Edgecombe County, North Carolina). Randomized controlled trials nested in the health care system will be conducted to test the impact and cost of several intervention strategies.

Prospect Hill Health Study. Study of the management of hypertensives in a rural community sponsored by the National Heart, Lung and Blood Institute. This included a survey, in a rural area surrounding an HEW-sponsored neighborhood health center, to determine the prevalence of hypertension and assess the factors associated with its successful management.

Rural Blood Pressure Treatment Study. This study conducted in a rural area of North Carolina concerns the study of hypertension and diabetes and the taking of medications by area residents.

Secular Trends in Mortality in North Carolina. Recent major decreases in total and cardiovascular mortality in adults is being experienced by all segments of the North Carolina population of blacks as well as whites. This exciting trend of approximately two to three percent reduction per year will be further investigated to distinguish among its possible causes, which include diffusion of risk factor reduction, increase efficiency of medical care, and environmental changes.

South-Pacific studies. These include the study of blood pressure and the migration of children. Preliminary findings have shown that migration from a Pacific atoll to New Zealand increases the blood pressure in young children, but not in older children. Serum cholesterol and its relationship to deaths in Polynesians is also being studied.

MEDICAL CARE

Family Nurse Practitioner Project. The evaluation of clinical decision making in primary care settings was one aspect of a research project designed to develop strategies for the assessment of the clinical skills of family-nurse practitioners. An indicator condition approach to quality care assessment was utilized. The final report has been submitted and will be published within the year.

Investigation of Physician Non-Adherence to Self-Formulated Process Criteria. This study has measured the extent to which physician performance as determined from their medical records conforms to criteria which they themselves formulate. This measure of physicians adherence to consensus criteria has been correlated with implicit peer review of a sample of these same patients' records. The correlations between the two methods of assessing medical care were all greater than .60, which is higher than that reported in other studies.

National Evaluation of Rural Primary Health Care Programs. This national evaluation project is designed to evaluate different models of rural health service programs according to the extent to which they are meeting specific social and health achievement goals. Crucial information needed for policy purposes will be developed, in the main, by establishing the relationship between the characteristics of the services fostered by each type of model and the nature and degree of their success.

Other projects:

Development of an Outpatient Functional Status Measure.

Randomized Trial of Health Hazard Appraisal and Health Education.

POPULATION

WHO Collaborative Study. This study is WHO supported and has been in progress since 1970. The study has been completed in five countries and is still in progress in five. The preliminary results demonstrate that there is an increased risk when pregnancies occur too close together, too frequently, or occur too early or too late in regard to maternal age.

Reassessment of Fertility Decline Prospects in Egypt. This project, funded by AID, is designed to characterize the population problems in Egypt and their impact on the economic development of the country and to assess the relative role of "development" versus "family planning" as measures to reduce fertility and slow population growth.

A Case for Family Planning in Africa Based on the Health Rationale. This new project, which will run for two years, is also funded by AID. It assesses and documents the health risks associated with unplanned fertility in Africa. The specific aims of the project are 1) to describe the demographic profile in Africa, 2) to characterize and analyze the health aspects of family formation based on existing data from Africa and other developing countries, 3) to

describe religious attitudes toward family planning and 4) to initiate a process of dissemination of the project findings.

Health Consequences of High Risk Pregnancies in Muslim Women: A Cross-National Maternity Center Study. This study, done in collaboration with the International Fertility Research Program, examined data from maternity records at twelve maternity centers in five Muslim countries as well as similar data from centers in non-Muslim countries in Africa, Asia and Europe. The results of the study, which were presented at the Pan Islamic Conference on Motherhood in Cairo in December 1978, showed that Muslim women are at a high risk of complications before, during, and after labor and that their children bear an equally high risk of mortality.

PSYCHOSOCIAL

Development of an Index to Measure Family Routines. One hundred and four "Family Routines" were rated on an eleven point Thurstone Equal Appearing Interval Scale by a sample (N-260) of Black and White lower and upper income families to determine degree of consensus for a subset of 30-40 routines judged to be important in "keeping families strong." The Family Routines Index will be used in clinical and field based studies as a measure of "social supports" in health research.

Estimation of the 10 Leading Causes of Mortality in the Early and Middle Adult Black Population in the U.S. and N.C., 1970. The data generated by this grant have been used very productively in the course, EPID 250, and several students are writing research papers for the course which include original analyses of hypothesized relationships between select social and economic indices and black excess mortality from one or more causes of death.

Perceptions of Weight and the Socio-cultural Correlates of Obesity. A semi-projective weight perception questionnaire has been developed and pretested on clinically obese patients. Preliminary results suggest that race, education and early childhood experiences predict perceptions of "ideal" body weight and "most healthy" body weight for obese patients. Future data analysis will assess the predictive power of some of the above socio-cultural variables for percent overweight and weight loss over 3-6 months following enrollment in a weight reduction program.

Replication of the Socio-ecologic Stressor and Hypertension Related Mortality Relationship among North Carolina Non-white Men, 45-54 years old for the 1970 time period. Analysis completed by the author reveal that, contrary to expectation, the James-Kleinbaum Socio-ecologic Stress model for N.C. does not predict excess black mortality from a wide variety of leading causes of death in early and middle adulthood. Whereas the model appears to be especially sensitive to hypertension related mortality, it is much less "sensitive" to deaths attributable to homicide, alcoholism and cancer (all sites combined). Since much of the epidemiologic literature concerning these causes of ill health implicates "urbanization" as a potentially key explanatory variable, analysis to be conducted this summer will focus on this factor. To this end, N.C. counties have been categorized by an index of urbanization and, controlling for "% blacks living below poverty levels" (or alternatively, "per capita income of blacks") will assess the association between "urbanization" and mortality among N.C. Blacks from hypertension and stroke, all heart disease, homicide, alcoholism and suicide.

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.

OTHER

Aluminum Workers Study. A research project to study mortality and morbidity among aluminum workers according to demographic characteristics, length of service and work site. It is in the data analysis stage.

Analysis of Epidemiological Studies of Air Pollution--Health Effects. Sponsored by the U.S. Environmental Protection Agency, initiated in September 1977, this project has been examining the association between prevalence of chronic disease in adults, incidence of acute respiratory disease in children, and area differences in lung function of children in relation to neighborhood air pollution concentration.

Clinical Evaluation of Licensed Multiple Puncture Devices for the Administration of Tuberculin. Under a subcontract from the University of Kentucky, this project involves the simultaneous comparison of six multiple puncture devices (MPD) for the administration of tuberculin in

an attempt to determine the product with greatest efficiency in the clinical evaluation of tuberculosis. Three subpopulations will be tested, approximately 10,000 people, drawn from schools, health clinics, and hospitals. The Department of Epidemiology will provide consultation concerning the research design, and to provide the data management services. We will also monitor the randomization process of the study populations and analyze and interpret the data.

Methodological Research. A study investigating an analytic method for comparing observed work-history of cases with that expected from non-cases. The method is being written for publication.

Needs of Epileptics in North Carolina. This project, in conjunction with the State Chronic Disease Branch, involves the study of the difficulties related to social aspects of the disorder which are encountered in areas such as employment, driving and insurance.

Problems of Epileptics in North Carolina, England and New Zealand. As yet incomplete, the findings raise the problems that epileptics have with the effects from the medications and how they influence their acceptance in society. This includes obtaining employment and the stigmatization by society. It appears this is a constant in all three countries mentioned regardless of the type of health services available in the countries.

B. Research or Training Funds Received During the Year

<u>Title</u>	<u>Completion Date</u>	<u>Funding Agency</u>
Assessment of Past Diet in Cancer Epidemiology	08/31/79	NCI, NIH
Drug Taking for Hypertension	02/28/79	NHLBI, NIH
Cardiovascular Epidemiology and Statistics	06/30/80	NHLBI, NIH
Environmental Epidemiology	06/30/82	NIEHS, NIH
Psychosocial Factors in Mental Health and Disease	12/31/79	Inst. Mental Health, NIH
Public Health Special Purpose Traineeship	06/30/80	Bureau of Health Man- power, HRA
Epidemiology Applied to Health Care	06/30/79	HRA, DHEW
Community Health and Air Pollution	08/31/80	EPA
Epidemiologic Studies in Human Reproduction	04/30/79	U.N. Fund for Population Activities
Occupational Safety and Health Education (Epidemiology Section)	07/01/79	Inst. of Occu- pational Health and Safety
Capitation Funds	09/30/79	PHS, Bureau of Health Manpower, HRA
Clinical Evaluation of Licensed Multiple Puncture Devices for the Administration of Tuberculin	04/30/80	Univ. of KY (Subcontract)
Risk of Colon/Rectal Cancer from Polluted Chlorinated Water Sources in N.C.	03/31/80	Biomed Sciences Research Support (BSRG)
Environmental Quality and Birth Defects	03/31/80	BSRG

Research & Training Funds (Cont'd)

<u>Title</u>	<u>Completion Date</u>	<u>Funding Agency</u>
Initiation of Water Quality and Colon Cancer Case Control	02/31/78	Water Resources Research Inst. NCSU
A Feasibility Study to Evaluate Procedures for Obtaining Cases and Controls for Evaluating the Relationship between Colon Cancer and Water Quality of Community Water Supplies.	09/30/79	EPA
Family Routines	03/31/80	BRSG (NIH, Div. of Research Resources).

C. Notable Publications of Faculty

Dragana Andjelkovich

Andjelkovich, D., Taulbee, J., Blum, S. "Mortality of Female Workers in a Rubber Manufacturing Plant." Journal of Occupational Medicine 20: 409-413, 1978.

Robert Beaglehole

Prior, I.A.M., Beaglehole, R., Davidson, F., Salmond, C.E. "The Relationship of Diabetes, Blood Lipids and Uric Acid Levels in Polynesians." In Bennett, P.H. and Miller, M. (eds.). Advances in Metabolic Disorders 4: 242-261, 1978.

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Beaglehole, R., Brough, D., Harding, W., Eyles, W. "A Controlled Smoking Intervention Programme in Secondary Schools." New Zealand Medical Journal 87: 278-280, 1978.

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Caroline Becker

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Gerardo Heiss

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Heyden, S., Heiss, G., Manegold, C.H., Tyroler, H.A., Hames, C.G., Bartel, A.G., Cooper, G. "The Combined Effect of Cigarette Smoking and Coffee Drinking on LDL-HDL-Cholesterol." Circulation, 1979. (In Press).

Heyden, S., Heyden, F., Heiss, G., Hames, C.G., "Smoking and Coffee Consumption in Three Groups: Cancer Deaths, Cardiovascular Deaths, and Living Controls." Journal of Chronic Diseases, 1979. (In Press).

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Rifkind, B.M., Tamir, I., Heiss, G., Wallace, R.B., Tyroler, H.A. "High-Density Lipoprotein Levels in Selected Lipid Research Clinics Prevalence Study Populations: A Brief Survey." Lipids 1: 105-442, 1979.

Christensen, B., Glueck, C., Kwiterovich, P., deGroot, I., Chase, G., Heiss, G., Mowery, R., Tamir, I., Rifkind, B.M. "Plasma Cholesterol and Triglyceride Distributions in Children and Adolescents." Pediatric Research, 1979.

Morrison, J., deGroot, I., Kelly, K., Mellies, M., Khoury, P., Lewis, D., Lewis, A., Firoelli, M., Tyroler, H.A., Heiss, G., Glueck, C. "Black-White Differences in Plasma Lipoproteins in Cincinnati School Children." Metabolism, 1979. (In Press).

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Barbara S. Hulka

Hulka, B.S., Hogue, C.J., Greenberg, B.G. "Methodologic Issues in Epidemiologic Studies of Endometrial Cancer and Exogenous Estrogen." American Journal of Epidemiology 107(4): 267-276, 1978.

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Phillips, J.M., Hulka, J.F., Hulka, B.S., Keith, D., Keith, L. "American Association of Gynecologic Laparoscopists' 1976 Membership Survey." Journal of Reproductive Medicine 21(1): 3-6, 1978.

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Gorton, T.A., Doerfler, D.L., Hulka, B.S., Tyroler, H.A. "Intra-familial Patterns of Illness Reports and Physician Visits in a Community Sample." Journal of Health and Social Behavior 20: 37-44, 1979.

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Michel A. Ibrahim

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Ibrahim, M.A. "The Case for Cervical Cancer Screening." Editorial. American Journal of Public Health 68(2): 114-115, 1978.

Greenberg, R.A., Wagner, E.H., Wolf, S.H., Cohen, S.B., Kleinbaum, D.G., Williams, C.A., Ibrahim, M.A. "Physician Opinions on the Use of Antibiotics in Respiratory Infections." Journal of the American Medical Association 240(7): 650-653, 1978.

Ibrahim, M.A., Wagner, E.H., Williams, C.W., Greenberg, R.A., Kleinbaum, D.G., Wolf, S.H., and Meininger, J.C. Assessing the Clinical Skills of Nurse Practitioners. Government Printing Office, DHEW, PHS, HRA Publication No. 1979. (In Press).

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Sherman A. James

James, S.A., Graham, T., Kaplan, B.H., Cornoni, J.C., et al. "Frequency of Church Attendance and Blood Pressure Elevation." Journal of Behavioral Medicine 1(1): 37-43, 1978.

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James, S.A., Wold, M., Putnam, S., Stiles, W. "The Medical Interview Satisfaction Scale: A Scale to Measure Patient Perceptions of Physician Behavior." Journal of Behavioral Medicine 1(4): 391-401, 1978.

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Berton H. Kaplan

Kaplan, B.H., Dimsdale, J., Haggerty, R., et al. "Social Support and Medical Care." Social Psychiatry, Summer, 1979.

Kaplan, B.H., Ibrahim, M.A. "Monograph on Family and Health: An Epidemiologic Approach." Editorial. Vol. II, Summer, 1979.

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Kaplan, B.H., House, M., et al. "Job Stress and Disease." Journal of Health and Social Behavior, June, 1979.

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Abdel R. Omran

Omran, A.R., Shore, R.E., Markoff, R.A., Friedhoff, A., Albert, R.E., Barr, H., Dahlstrom, W.G., and Pasternack, B.S. "Follow-Up Study of Patients Treated by X-ray Epilation for Tinea Capitis: Psychiatric and Psychometric Evaluation." American Journal of Public Health 68(6): 561-567, 1979.

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Carl M. Shy

Shy, C.M. "Health Effects of Air Pollution." In collaboration with the Ad Hoc Committee on Health Effects of Air Pollution, American Thoracic Society, New York, American Lung Association, 1978, 48 pp.

Shy, C.M. "Health Consequences of Sulfur Oxides." Chapter 3 in: Sulfur in the Environment. Part II: Ecological Impacts. A. Nriagn, Ed., New York, John Wiley & Sons, 1978, pp. 75-108.

Herman A. Tyroler.

Haynes, S.G., McMichael, A.J., Tyroler, H.A. "Survival After Early and Normal Retirement." Journal of Gerontology, 33(2): 269-78, 1978.

Glueck, C.J., Tyroler, H.A., Heiss, G., et al. "Black-White Plasma Lipoprotein Differences in Children." Circulation, 57-58: II-31, 1978.

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Morrison, J.A., DeGroot, I., Kelly, K.A., Mellies, M.J., Khoury, P., Edwards, B.K., Lewis, D., Lewis, A., Fiorelli, M., Heiss, G., Tyroler, H.A., and Glueck, C.J. "Black-White Differences in Plasma Lipids and Lipoproteins in Adults: The Cincinnati Lipid Research Clinic Population Study." Preventive Medicine, 8: 34-39, 1979.

Heyden, S., Tyroler, H.A., Heiss, G., Hames, C.G. and Bartel, A. "Coffee Consumption and Mortality: Total Mortality, Stroke Mortality, and Coronary Heart Disease Mortality." Archives of Internal Medicine, 138: 1472-1475, October 1978.

International Agency for Research on Cancer Working Group on the Evaluation of the Carcinogenic Risk of Chemicals to Humans (Member of Working Group, H.A. Tyroler, M.D.) "Some Monomers Plastics and Synthetic Elastomers and Acrolein." World Health Organization, International Agency for Research on Cancer. 19: Feb. 1979, Lyon, France.

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Tyroler, H.A. "The John C. Cassel Memorial Symposium. An Evans County Cardiovascular Study Monograph: Introduction." Journal of Chronic Diseases. 1979. (In press).

Edward H. Wagner

Greenberg, R.A., Wagner, E.H., Wolf, S.H., Cohen, S.B., et al. "Physician Opinions on the use of Antibiotics in Respiratory Infections." Journal of the American Medical Association, 240(7): 650-653, 1978.

Wagner, E.H., Williams, C.A., Greenberg, R.A., Kleinbaum, D.G., Wolf, S., and Ibrahim, M.A. "A Method for Assessing Clinical Decision-Making in Primary Care." American Journal of Public Health, 68(5): 464-470, May 1978.

Ibrahim, M.A., Wagner, E.H., Williams, C.A., et al. "Assessing the Clinical Skills of Nurse Practitioners." Government Printing Office, DHEW, PHS, HRA Publication No. 1979. (In press).

Carolyn A. Williams

Wagner, E.H., Williams, C.A., Greenberg, R.A., Kleinbaum, D.G., Wolf, S., and Ibrahim, M.A. "A Method for Assessing Clinical Decision-Making in Primary Care." American Journal of Public Health, 68(5): 464-470, May 1978.

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Ibrahim, M.A., Wagner, E.W., Williams, C.A., Greenberg, R.A., Kleinbaum, D.G., Wolf, S.H., and Meininger, J.C. "Assessing the Clinical Skills of Nurse Practitioners." Government Printing Office, DHEW, PHS, HRA Publication No. 1979. (In press).

Williams, C.A. "The Nature and Development of Conceptual Framework." Chapter 5 in: Issues in Nursing Research. F.S. Downs and J.W. Fleming, Eds., Appleton-Century-Crofts, pp. 89-106, 1979.

Williams, C.A. "The Influence of Employment Settings on Nurse Practitioner Functions." Chapter in: Nurse Practitioners: U.S.A. H.A. Sultz, O.M. Henry and J.A. Sullivan, Eds., D.C. Health and Company, 1979. (In press).

Williams, C.A., and Highriter, M.E. "Community Health Nursing: Population Focus and Evaluation." Public Health Reviews. 1979. (In press).

- D. Special major items of equipment obtained during the year and its use.

Two computer terminals were purchased this year for analysis of epidemiological studies data associated with the CHES program of the Institute for Environmental Studies.

IV. Public Service

A. Faculty Service Programs

Dragana Andjelkovich

National:

Presented paper on "Latency Analysis in an Occupational Study of Stomach Cancer" at the 11th Annual Meeting of the Society for Epidemiologic Research, Iowa City, Iowa, June 1978. (with Blum, S.B., Smith, A.H. and Tyroler, H.A.)

International:

Presented paper on "Mortality of Female Workers in the Rubber Industry" at the XIX International Congress on Occupational Health, Dubrovnik, Yugoslavia, September 1978. (with Taufbee, J., Blum, S., and Tyroler, H.A.)

Presented paper on "Stomach Cancer Among Rubber Workers: An Epidemiologic Investigation" at the XIX International Congress on Occupational Health, Dubrovnik, Yugoslavia, September 1978. (with Blum, S., and Tyroler, H.A.)

Caroline Becker

School of Public Health:

Member, Administrative Board of the School of Public Health, September 1978 - August 1983.

Member, B.S.P.H. Evaluation Committee, December 1978 - December 1979.

University:

Member, Administrative Board of the School of Library Science.

Elected Secretary - Treasurer, Elisha Mitchell Scientific Society, April 1979 - 1980.

Member, Board of UNC-CH Faculty Club, 1979 - 1980.

State:

Consultants, NCHA in various research projects.

President, Board of Home Health Agency of Chapel Hill, 1979 - 1982.

Gerardo Heiss

Department:

Cardiovascular Training Program Activities.

National:

Conference on the Decline of Cardiovascular Mortality NHLBI.

Workshop on HDL Measurement Methodology, NHLBI.

Barbara S. Hulka

School of Public Health:

Member, University Committee on CADPAC

University:

Member, Computerized Cancer Data Base Advisory Committee
Presentation to Gynecologic Oncology residents and faculty
at UNC, NCMH on Estrogen and Endometrial Cancer (15
people for 1 hour).

State:

Presentation to N.C. Society of Internal Medicine on
Explicitness-Implicitness Criteria in Peer Review, Wrightsville
Beach, N.C. (60 people for 45 minutes).
Presentation at Duke University Department of Community
and Family Medicine on Use of Explicitness Criteria in Peer
Review (20 people for 1 hour).

National:

Member, National Center for Health Statistics Panel to
review the "Ambulatory Medical Care Data Set"
Member, National Academy of Sciences, Washington, D.C.,
Institute of Medicine Committee on Health Services Research.
Member, National Academy of Sciences Committee on Epidemiology
and Veterans Follow-up Studies.
Member, Governing Council of American Public Health
Association.
Member, Editorial Board of Health Services Research.
Reviewer, Journal of Archives of Internal Medicine; Journal
of Annals of Internal Medicine; Journal of American Journal
of Public Health; Journal of Community Health; Journal of
Medical Care.
Member, Society for Epidemiologic Research.
Member, American Epidemiologic Society.
Member, President-Elect of Delta Omega, the National
Honorary Society.
Site Visit for NIH to Harvard University, Boston, Mass.
Site Visit for NIH to Medical College of Virginia, Richmond,
VA.
Site Visit for NIH to Kaiser Hospital, Walnut Creek,
California.
Presentation to Epidemiology Section meeting of American
Public Health Association meeting in Los Angeles, CA on
Use of Explicitness and Implicit Criteria in Peer Review
(50 people for 20 minutes).

International:

World Health Organization Travel Study Fellowship from
April 21, 1978 - May 30, 1978.

Michel A. Ibrahim

Short Courses:

Faculty, Epidemiology Summer Institute, University of
Minnesota 1978 and 1979.

School of Public Health:

Chairman, Finance and Personnel Committee.
Member, Administrative Board.
Chairman, Ad Hoc Committee for Self-Study.

University:

Member, Administrative Board, UNC School of Medicine.
Member, Occupational Health Studies Group Policy Board.

State:

Member, Board of Directors, North Carolina Heart
Association.
Member, Board of Directors, North Carolina Public Health
Fund.

National:

Consultant, National Cancer Institute.
Consultant, National Institute for Aging.
Editorial Consultant, Journal of Chronic Disease.
Associate Editor, American Journal of Epidemiology.
Chairman, Editorial Board, American Journal of Public
Health.

International:

Member, U.S. - Egypt Joint Working Group on Health
Cooperation.
DHEW Development of Health Services Subcommittee.

Sherman James

Department:

Coordinator, Seminar Series, January 1978 - January 1979.
Member, Admissions Committee.
Member, Qualifying Exam Committee.
Member, Recruitment Committee.

University:

Member, Faculty Council 1978 - 1981.
Member, Committee on the Status of Black Faculty 1978 - 1981.

Sherman James (continued)

National:

Member-at-Large, Division 27, American Psychological Association.
Member, Editorial Board, Journal of Community Psychology.
Member, Editorial Board, Medical Care.
Editorial Consultant, American Journal of Public Health.
Consultant, National Center for Health Services Research.
Member, Extramural Training and Orientation Ad Hoc Advisory Panel for the Civil Rights Plan for the National Center for Health Services Research.
Consultant, Institute for Urban Affairs and Research (Mental Health Research and Development Center).
Member, Action Board, American Public Health Association (1977-79).
Member, Advisory Panel for the National Study of Black Mental Health Survey Research Center, University of Michigan, Ann Arbor, Michigan.

Berton H. Kaplan

Short Courses:

Presented a short 1 day Seminar to N.C. Women's Forum on Coping with Stress.

Department:

Member, Admissions Committee.

School of Public Health:

Member, Academic Programs Committee.

University:

Co-coordinator, in Developing a Joint Program in Aging and Medical Care Between the Department of Medicine and Epidemiology.

State:

Member, Research Advisory Committee, N.C. Heart Association.
Member, Research Advisory Group to the Governor's Conference on Mental Health.

National:

Member, Behavioral Medicine Study Section, National Institutes of Health.
Member, National Advisory Panel on Psychosocial Issues in Child Diabetics.
Member, Research Advisory Committee, the Psychosocial Issues in the Care of Cancer Patients.
Member, Social Support and Depression Project at the University of Denver.

Abdel Omran

Department:

Member, Admissions Committee.
Director, Population Epidemiology Program.

School of Public Health:

Member, Research Committee.

University:

Member, I.P.O.
Member, CPC Fellow.
Member, Impact Study Group.
Member, Collaborated with School of Social Work in application for grant for S.W. Project in Egypt.

International:

Director, WHO Reference Center for Epidemiologic Studies in Human Reproduction.
Consultant, World Bank, UNFPA, IFRP.
Member, WHO Advisory Panel in Human Reproduction to the Director General.
Presented paper at the Pan Islamic Conference on Motherhood, Cairo, Egypt, December 1978. Health Consequences of High Risk Pregnancies in Muslim Women: A Cross-National Maternity Center Study.
Delivered Keynote Speech at the Fourth International Conference on Voluntary Sterilization, Seoul, Korea, May, 1979. Acceptability Dynamics of Male and Female Sterilization.
Member, WHO Steering Committee for Research in Human Reproduction.

Carl M. Shy

Short Courses:

Presented a one-week Epidemiology course at the Summer Institute sponsored by the Occupational Safety & Health Educational Resource Center, July 1978.
Presented a short-course on "Water Supply Engineering," sponsored by the Department of Environmental Sciences and Engineering. Health, Effects: Epidemiological Considerations, May 1978.

Department:

Chairman, Admissions Committee.
Department Equal Opportunity Employment Officer.

Carl M. Shy (continued)

University:

Co-chairman, Environmental Studies Council.
Chairman, Radiation Safety Advisory Committee.

State:

Chairman, Conference on Energy Technologies and Policies
for North Carolina, May 1978.
Consultant, National Institute of Environmental Health
Sciences - RTP.
Member, Board of Directors, N.C. Lung Association, Research
Triangle Lung Association.
Chairman, Advisory Panel on Research Needs for an Inhaled
Particulate Standards. (Advisory to EPA-RTP) April -
June 1978.

National:

Editorial Consultant, The American Journal of Public Health,
Archives of Environmental Health.
Member, Air Conservation Commission, American Lung
Association.
Consultant, U.S. Congress Office of Technology Assessment.
Consultant, California Air Resources Board.
Chairman, NIH Special Site Visit Committee, University of
California at Davis, February 12-14, 1978.
Member, Beryllium Review Panel, Center for Disease Control
DHEW, October 1978.
Chairman, Ad Hoc Committee on Health Effects of Air Pollution,
American Thoracicae Society 1976 - 1978.

International:

Consultant, World Health Organization.

Cecil Slome

State:

Chairman, Planning Committee for and Instructor in Respiratory
Disease Institute of N.C. Lung Association Black Mountain,
N.C., July 1978.
Consultant, The Professional Advisory Board of the Epilepsy
Association of North Carolina.

International:

As part of the Pogue leave of absence, I examined the nature
of Health Services provided for Mothers and Children of
Epileptics in New Zealand, Kenya and South Africa.

Herman A. Tyroler

Short Courses:

- Presented a short course on Occupational Epidemiology for OHSERC.
- Presented a short course on Cardiovascular Disease Epidemiology, Graduate Summer Session in Epidemiology, University of Minnesota, 1978 & 1979.

Department:

- Program Director, Environmental Epidemiology Research Training Grant.
- Co-Director, Cardiovascular Disease Epidemiology and Biostatistics Research Training Grant.
- Member, Admissions Committee

School of Public Health:

- Epidemiologic Coordinator, Occupational Health Studies Group Policy Board.

University:

- Member, Cancer Center Advisory Committee.

State:

- North Carolina Heart Association.

National:

- Member, Research Committee, American Heart Association Hypertension Detection and Follow-up Program.
- Chairman, Behavioral Aspects Subcommittee.
- Member, Medical Care Subcommittee Lipids Research Clinic Program, NHLI.
- Chairman, Epidemiology Committee.
- Chairman, Epidemiology Executive Committee.
- Chairman, Family Studies Committee.
- Chairman, Family Studies Executive Committee.
- Chairman, Prevalence Committee.
- Chairman, Prevalence Executive Committee.
- Member, Advisory Council.
- Member, Safety and Data Monitoring Board, Epidemiology Branch, NHLI
- Member, Epidemiology Ad Hoc Advisory Committee.
- Member, Review Committee, Population Studies Division, Health Effects Research Laboratory, U.S. Environmental Protection Agency.

International:

- Member, International Agency for Research on Cancer (IRAC).
- Member, U.S./U.S.S.R. Steering Committee for Problem Area 1: The Pathogenesis of Atherosclerosis.
- Member, U.S./Israel Steering Committee, Lipid Research Clinic Program, NHLBI.

Edward H. Wagner

Department:

Admissions Committee

School of Public Health:

Advisor, M.D.-M.P.H. Program

National:

Consultant, Vanderbilt University Rural Evaluation Project.

Consultant, W. Kellogg Foundation Health Promotion Disease Prevention.

Member, Subcommittee of National High Blood Pressure Education Committee.

International:

Consultant, Danish National Committee on Health Promotion.

Carolyn Williams

Department:

Department Representative for Carolina Challenge.

School of Public Health:

Member, Institutional Review Board.

National:

✓ Member, Publications Board, American Publications Health Association.

✓ Chairman, Research Advisory Committee, American Nurses Foundation.

✓ Member, Editorial Board, Family and Community Health.

✓ Vice-Chairperson, Commission on Research, American Nurses Association.

Consultant, National Center for Health Services Research

✓ Member, Review Panel for Multipurpose Activities Center Supplement Grants, National Institute of Arthritis, Metabolism and Digestive Disease, NIH, May 10-12, 1978.

✓ Member, Site Visit Team for Research Project, Division of Nursing, Bureau of Health Manpower, Health Resources Administration, DHEW, May 1978.

✓ Member, Evaluation Panel for RFP entitled "Evaluation of Findings from Nurse Practitioners and Physician Assistant Studies." National Center for Health Services Research, DHEW, September 1978.

Carolyn Williams (continued)

Member, Panel for Health Regulation and Promotion
National Conference on Health Research Principles
convened by Secretary Joseph A. Califano, Bethesda,
MD, October 3-4, 1978.

Member, Review Panel for Multipurpose Arthritis Center
Supplement Application, National Institute of
Arthritis, Metabolism and Digestive Disease, NIH,
October 23, 1978.

- B. Anticipated goals or increases in public service programs
in the future,

Members of our faculty have provided services in many
phases of public health from the local to the interna-
tional level. We expect to continue to be involved to
at least the same extent in both educational and research
activities. One such activity already being planned is
our involvement in the development and delivery of a
Principles of Public Health course in collaboration with
other departments in the School, which will be offered on
a regional basis to public health workers in North
Carolina.

V. FACULTY

A. List of Faculty

1. Full-time (*Joint, Primary appointment in Epidemiology)

Dragana A. Andjelkovich, M.D., M.P.H., Assistant Professor

Caroline Becker, M.D., Assistant Professor

Harvey Checkoway, Ph.D., Research Assistant Professor

John T. Fulton, D.D.S., Professor Emeritus

Gerardo Heiss, M.D., Ph.D., Research Assistant Professor

Barbara S. Hulka, M.D., M.P.H., Professor

Michel A. Ibrahim, M.D., Ph.D., Professor and Chairman

Sherman A. James, Ph.D., Assistant Professor

Berton H. Kaplan, Ph.D., Professor

Abdel R. Omran, M.D., D.P.H., M.P.H., Professor

Ralph C. Patrick, Ph.D., Associate Professor

*Carl M. Shy, M.D., Dr. P.H., Professor of Epidemiology and Director of Institute of Environmental Studies

Cecil Slome, M.B.Ch.B., D.P.H., Professor

Herman A. Tyroler, M.D., Professor

*Carolyn Williams, Ph.D., Assistant Professor of Epidemiology and Associate Professor of Nursing.

2. Part-time

Gory J. Love, D.Sc., M.P.H., Research Associate Professor

3. Visiting

Robert Beaglehole, M.Sc., M.R.C.P., M.B.,Ch.B., Visiting Assistant Professor

4. Joint

Edward H. Wagner, M.D., M.P.H., Associate Professor of Medicine and Associate Professor of Epidemiology

5. Adjunct and Clinical

James W. Begun, Ph.D., Adjunct Assistant Professor
 Stephen N. Brown, M.D., M.P.H., Adjunct Associate Professor
 Robert H. Fletcher, M.D., Clinical Associate Professor
 Suzanne W. Fletcher, M.D., Clinical Associate Professor
 H. Hugh Funderberg, M.D., Adjunct Professor
 Stephen H. Gehlbach, M.D., M.P.H., Adjunct Assistant Professor
 Curtis G. Hames, M.D., Clinical Professor
 Carl G. Hayes, Ph.D., Adjunct Associate Professor
 Siegfried H. Heyden, M.D., Ph.D., Adjunct Professor
 Michael D. Hogan, Ph.D., Adjunct Assistant Professor
 Joan C. Huntley, Ph.D., Adjunct Associate Professor
 Eugene S. Mayer, M.D., M.P.H., Adjunct Associate Professor
 Melinda S. Meade, Ph.D., Adjunct Assistant Professor
 George R. Parkerson, M.D., M.P.H., Adjunct Assistant Professor
 Samuel M. Putnam, M. D., Adjunct Assistant Professor
 Walter J. Rogan, M.D., M.P.H., Adjunct Assistant Professor
 Fredric J. Romm, M.D., M.P.H., Adjunct Assistant Professor
 Seth A. Rudnick, M.D., Clinical Assistant Professor
 Michael R. Swift, M.D., Clinical Professor
 Gregg S. Wilkinson, Ph.D., Adjunct Associate Professor

B. Changes during the year

1. Additions

Harvey Checkoway, Ph.D., Research Assistant Professor
 James W. Begun, Ph.D., Adjunct Assistant Professor
 Stephen N. Brown, M.D., M.P.H., Adjunct Associate Professor
 Robert H. Fletcher, M.D., Clinical Associate Professor
 Suzanne W. Fletcher, M.D., Clinical Associate Professor
 Curtis G. Hames, M.D., Clinical Professor
 Siegfried H. Heyden, M.D., Ph.D., Adjunct Professor
 Melinda S. Meade, Ph.D., Adjunct Assistant Professor
 Fredric J. Romm, M.D., M.P.H., Adjunct Assistant Professor
 Seth A. Rudnick, M.D., Clinical Assistant Professor
 Michael R. Swift, M.D., Clinical Professor
 Gregg S. Wilkinson, Ph.D., Adjunct Associate Professor

2. Promotions

Edward H. Wagner, M.D., M.P.H., Associate Professor

3. Miscellaneous Changes

George R. Parkerson, M.D., M.P.H., from Research Assistant Professor to Adjunct Assistant Professor
Carolyn Williams, Ph.D., Primary appointment changed from School of Nursing to School of Public Health

4. Leaves

Barbara S. Hulka, Professor
Cecil Slome, Professor

5. Losses

Ian Russell, M.Sc., Ph.D., Visiting Assistant Professor
(Resignation)
Allan H. Smith, M.B.Ch.B., Ph.D., Research Assistant
Professor (Resignation)
David C. Deubner, M.D., M.P.H., Adjunct Assistant
Professor (Resignation)
Seymour Grufferman, M.D., M.P.H., Adjunct Assistant
Professor (Resignation)
James S. House, Ph.D., Adjunct Assistant Professor
(Resignation)
Vernon B. Hunt, M.D., M.P.H., Adjunct Assistant
Professor (Resignation)

C. Proposed additions to faculty by

1. Number: One
2. Rank: Research Assistant Professor
3. Specialization: Occupational Medicine

D. Special achievements by faculty--honors, awards, etc.

Michel Ibrahim was presented the Achievement Recognition Award by the North Carolina Heart Association (1979).

Sherman James was elected to the Board of Editors of Medical Care.

Berton Kaplan was elected to the Academy of Behavioral Medicine Research as a Fellow.

Abdel Omran was appointed advisor to the Ministry of Health, Egypt, in the areas of Health Research, Family Planning, and Health Manpower Development.

Cecil Slome was awarded leave of absence under the Pogue Faculty Research Fund.

Caroline Becker was awarded the Founders' Award from the North Carolina Heart Association, 1979.

E. Special Assignments of Faculty

Sherman James served as methodology consultant to the "Ad Hoc Committee to Investigate the Environment of the Medical School" at the request of Christopher C. Fordham, III, M.D., Vice Chancellor for Health Affairs.

Abdel Omran has agreed to represent the Department in developing a joint project with Research Triangle Institute regarding Rural Health in Egypt.

Michel Ibrahim served as Guest Editor for a Special Issue of the Journal of Chronic Disease reporting on the proceedings of the Bermuda Symposium on Case-Control Studies, for which he also served as moderator.

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

The Department continues to enjoy its National and International reputation as one of the leading institutions in the field of Epidemiology. We can only admit a small fraction of the large number of applicants to our graduate program. A high percentage of those offered admission accept our offer. Our department is the only Department of Epidemiology in the country which has an organized program in Health Services Research and Clinical Epidemiology. We are now expanding the area of investigation in Cancer Epidemiology by studying health effects of exposure to low-level ionized radiation, and applying for a training grant to support 4-5 postdoctoral students. In collaboration with State and local governments, the Department is embarking on a systemic program for the control of hypertension in rural areas, and in the state as a whole.

