

Department of Epidemiology

ANNUAL REPORT

July 1, 1973 - June 30, 1974

I. Departmental Organization and Administration

The Faculty of the Department of Epidemiology consists of eight professors (including one Professor Emeritus and one visiting professor), two associate professors, thirteen assistant professors (seven of whom hold joint appointments with other departments in the Division of Health Sciences), one instructor, one lecturer, and four research associates.

The Chairman, Dr. John Cassel, was on sabbatical leave and Dr. Michel Ibrahim has served as Acting Chairman (August 1973-August 1974).

The Staff of the Department consists of one administrative secretary, five computer programmers, one data processor, three statistical aides, four social research assistants and eight secretaries.

The Department has developed a series of committees to facilitate and direct the administrative aspects. The Steering Committee is charged with curriculum planning and development, continuing evaluation of courses, faculty development plans, and recruitment of both students and faculty. The Admissions Committee reviews all applications and forwards recommendations to the Chairman of the Department. The Students' Affairs Committee aids the student in the achievement of the academic plans by periodic progress reviews, by consultation with faculty and students on problem areas and by acting as a facilitating resource.

II. Instructional Programs

1. Courses and curricula

- (a) Major changes during the year  
No major changes during the year
- (b) New programs being planned, & deletions to be made  
None
- (c) Honors programs and other special courses or programs  
None
- (d) Participation in interdepartmental programs  
Off-campus MPH program  
The Faculty in the Department of Epidemiology offered Epid 160 in the Raleigh off-campus program for Spring, 1974. Approximately ten faculty members were involved in teaching principles of epidemiology to thirty-forty students.

2. Enrollment

During the current year, there have been 33 registered students in the field of Epidemiology. One student received the Dr.P.H. and one received the MPH in December 1973. Three students received the MSPH and two students received the MPH in the May 1974 commencement. In addition, one student expects to receive the MS, one expects to receive the MSPH, and two expect to receive the MPH, while two expect to receive the Ph.D, at the August commencement.

(a) Number of Majors in Department .....	33
MPH .....	12
MSPH.....	3
Dr.P.H. ....	3
Ph.D.....	15
Non-Degree.....	0
Total Enrollment in Department Courses.....	575 (540)est.
<u>Enrollment of Major Students:</u>	
Fall, 1973 (12 MPH, 3 MSPH, 3 Dr.P.H., 15 Ph.D., 0 Post-doctoral)	.33
Spring, 1974 (12 MPH, 3 MSPH, 2 Dr.P.H., 15 Ph.D., 0 Post-doctoral)	.32
Summer, 1974 (Estimated) (8 MPH, 1 MSPH, 2 Dr.P.H., 15 Ph.D.).....	26
Men: (1 MSPH, 7 MPH, 4 Ph.D., 1 Dr.P.H.) .....	13
Women: (2 MSPH, 5 MPH, 11 Ph.D., 2 Dr.P.H.) .....	20
Undergraduate .....	0
Graduate (12 MPH, 3 MSPH).....	15
Doctoral (15 Ph.D., 3 Dr.P.H.).....	18
Non-degree.....	0

Place of Residence:

North Carolina.....	11
Southern States	
Maryland.....	3
South Carolina.....	1
Texas.....	1
Other States	
Wisconsin.....	1
Washington, D.C.....	1
Oregon.....	1
New York.....	3
California.....	1
New Jersey.....	1
Massachusetts.....	1
Minnesota.....	2
Ohio.....	1
Pennsylvania.....	1
Other Countries.....	4
New Guinea.....	1
Canada.....	1
Turkey.....	1
Yugoslavia.....	1

(b) Courses offered in the Department of Epidemiology, and enrollment:  
 Number of courses given.....30

<u>Course Number</u>	<u>Title</u>	<u>Enrollment</u>
EPID 140	Problems in Epidemiology	40
EPID 141	Problems in Epidemiology	23
EPID 160	Principles of Epidemiology	176
EPID 161	Epidemiology in Population Dynamics & Family Planning Program	54
EPID 162	Epidemiology in Environmental Health	48
EPID 168	Behavioral Science in Health Pro- grams and Research	Not offered
EPID 211	Determinants of Communicable Disease	11
EPID 230	Applied Methods in Epidemiology & Health Services Research	14
EPID 231	Epidemiologic Research in Personal Health Services	12
EPID 240	Alcohol, Behavior and Health	14
EPID 241	Research Methodology in Alcohol Usage	3
EPID 260	Epidemiological Foundations for Disease Control Programs	2
EPID 261	Dental Epidemiology	4

<u>Course Number</u>	<u>Title</u>	<u>Enrollment</u>
EPID 262	Epidemiology of Program Acceptance	15
EPID 264	Culture and Health	34
EPID 266	Epidemiological Investigation	9
EPID 265	History of Epidemiology	4
EPID 287	Statistical Methods in Epidemiology	
EPID 315	Field Training	7
EPID 360	Research in Epidemiology	14
EPID 361	Research in Epidemiology	15
EPID 362	Environmental Epidemiology Seminar	
EPID 368	Evaluative Research Methods	11
EPID 393	Masters Thesis	19
EPID 394	Doctoral Dissertation	13
		<u>547</u>

Students from other departments and schools in the University enrolled in regular Public Health courses in the School of Public Health :

<u>Course No.</u>	<u>Breakdown of Students</u>	<u>Hours</u>	<u>Students</u>
EPID 140	1 Social Work	2.0	2
	1 Evening College	3.0	
EPID 141			
EPID 160	1 N.C. State	3.0	17
	11 Graduate School	33.0	
	5 Evening College	15.0	
EPID 161	1 Graduate School	3.0	2
	1 Evening School	3.0	
EPID 162	3 Graduate School	9.0	5
	2 N.C. State	6.0	
EPID 231	2 Graduate School	6.0	2
EPID 240	1 Graduate School	2.0	1

Degrees Estimated Through August, 1974

	<u>M.S.</u>	<u>M.S.P.H.</u>	<u>M.P.H.</u>	<u>Ph.D.</u>	<u>Dr.P.H.</u>	<u>Total</u>
December 1973			1		1	2
May 1974		3	2			5
August 1974	1	1	11	2		15

(c) Quality of students, career plans of graduate majors

Of those enrolled in Epidemiology in 1973-74, seven matriculated as M.D.'s, one entered as an O.D., one as a D.V.M., seven were either R.N.'s or Masters of Science in Nursing, ten had already received their Masters and matriculated in the doctoral program, seven matriculated with the bachelors degree; of those seven, three plan to seek their doctorate in Epidemiology or medicine.

Most of the enrolled students plan to return to fields of teaching research, administrative positions within the federal government, or working with health agencies in the community.

3. Description of advising system for graduate majors

Each major in the Department is assigned a faculty member or sometimes two faculty members as their advisor. This assignment of the faculty member is based on a review of the student's area of interest, prior experiences, and future goals. After assignments are made and once the student has become involved, he is given the option to change advisors to meet his or her needs.

In addition, the new student is assigned a student advisor who is usually involved in a second year masters or doctoral program.

4. Teaching load of faculty

Fall 1973

<u>Course and Number</u>	<u>Section</u>	<u>Descriptive Title</u>	<u>Instructor Name</u>
EPID 140	1	Probs in Epid	Wagner Cornoni Gruber Ibrahim Omran Slome
EPID 140	2	Probs in Epid	Cornoni Williams Omran Tyroler Becker Ibrahim Kaplan
EPID 140	3	Probs in Epid	Cornoni Patrick
EPID 140	4	Probs in Epid	Ibrahim
EPID 160	1	Princ of Epid	Tyroler Slome
EPID 160	2	Princ of Epid	Patrick
EPID 160	3	Princ of Epid	Becker
EPID 160	4	Princ of Epid	Cornoni
EPID 160	5	Princ of Epid	Ibrahim
EPID 160	6	Princ of Epid	Cordle
EPID 161		Princ of Epid	Omran
EPID 162	1	Epid in Envr Hlth	Gruber
EPID 162	2	Epid in Envr Hlth	McMichael
EPID 211		Determ of Com Dis	Becker
EPID 231		Meas Qual Med Care	Hulka
EPID 240		Alcohol Behv & Hlth	Cornoni

Fall 1973 - cont.

<u>Course and Number</u>	<u>Section</u>	<u>Descriptive Title</u>	<u>Instructor Name</u>
EPID 360		Res in Epid	Ibrahim Tyroler
EPID 393		Masters Thesis	Wagner Tyroler Omran Cornoni
EPID 394		Doctoral Dissert	Ibrahim Becker Cornoni Patrick

Spring 1974

<u>Course and Number</u>	<u>Section</u>	<u>Descriptive Title</u>	<u>Instructor Name</u>
EPID 141	1	Probs in Epid	Ibrahim Cornoni Kaplan Wagner
EPID 141	2	Probs in Epid	Wagner Cornoni Williams
EPID 141	3	Probs in Epid	Wagner Tyroler Slome Omran
EPID 160	Off Campus	Princ of Epid	Kaplan Patrick Omran Williams Gruber Ibrahim McMichael Hulka
EPID 230		App Meth/Epid & HSR	Cornoni Cordle

Spring 1974 - cont.

<u>Course and Number</u>	<u>Section</u>	<u>Descriptive Title</u>	<u>Instructor Name</u>
EPID 241		Res Meth Alcohol	Cornoni
EPID 260		Epid Found/Dis Cont	Slome
EPID 261		Dental Epid	Hughes
EPID 262		Epid of Prog Accept	Patrick
EPID 264		Culture and Health	Kaplan
EPID 266		Epid Investigation	Tyroler
EPID 361		Res in Epidemiology	Tyroler Kaplan Patrick
EPID 368		Eval Research Meth	Ibrahim
EPID 393		Masters Thesis	Tyroler Wagner
EPID 394		Doctoral Dissert	Ibrahim Cornoni Becker Tyroler



Students Outside Department of Epidemiology taking Courses especially set up for them by our Faculty

<u>Name of Course</u>	<u>Faculty</u>	<u>Hours of Instruction</u>	<u>Number of Students</u>
Off-campus EPID 160	Gruber	3	30-40
	Kaplan	3	
	Slome	3	
	Hulka	3	
	Patrick	3	
	McMichael	3	
	Omran	3	
	Williams	3	
	Cordle & Cornoni	3	
	Community Psychiatry	Kaplan	
Population Seminar for Foreign Students	Gruber	6	30
2nd Year Medical Student Curriculum in Epidemiology	Hulka , Kaplan Ibrahim ,Tyroler,Wagner	8	
1st Year Medical Student Neoplasia Curriculum	Hulka	3	
Microbiology Student	Becker	2	1
Clinical Trials and Community Intervention Programs for Medical Students	Tyroler	2	
HEED 105	Cornoni	2	2

Students from other Universities Receiving Instruction set up  
for them at those Universities

<u>Name of Course</u>	<u>Faculty</u>	<u>Hours of Instruction</u>	<u>Number of Students</u>
Engineering Foundation Curriculum on Evalua- tion of Health Ser- vices in Maine	Hulka	1	100
Faculty Institute on Medical Care in Ann Arbor, Michigan	Hulka	1	30
Summer Institute in Epid- emiology, University of Minnesota	Tyroler	6 Weeks	

5. Teaching responsibility of graduate students

Second year doctoral students serve as student preceptors for the core course (EPID 160) in Epidemiology during the Fall semester. Duties include assistance to the instructor in planning seminars, special one-to-one tutoring with students who are experiencing difficulty in learning the principles of epidemiology, make-up sessions or extra sessions for those students who need additional help (as a group).

### III. RESEARCH PROGRAMS

As the Department of Epidemiology moves into its sixteenth year, the diversification of its research training efforts has required the development of more formal programs. Six such areas have now been designated: A general epidemiology program, environmental epidemiology, clinical epidemiology, epidemiology applied to health services research, to population planning and to alcohol drug abuse. In each of these program areas an attempt has been made to maintain the interdisciplinary nature of the department.

The major research developments in the department include the Evans County cardiovascular studies, the study of rapid social change and blood pressure (Ponape Study), the organization, utilization and assessment of primary health care, assessment of the clinical competence of family nurse practitioners and the combined epidemiological and environmental monitoring of workers in the rubber industry.

#### A. NOTABLE PUBLICATIONS BY FACULTY

##### Joan Cornoni

(With B.E.K. Klein, F. Jones, and E. Boyle, Jr.) "Overweight Indices as Correlates of Coronary Heart Diseases and Blood Pressure," Human Biology, Sept. 1973, Vol. 45, No. 3, pp. 329-340. Wayne State University Press, 1973.

##### Barbara Hulka

(With J.C. Cassel, M. A. Ibrahim) "Evaluation of Primary Medical Care." Chapter in Monograph, An Introduction to Family Medicine. (In Press.)

(With S. J. Zyzanski, J. C. Cassel) "Scale for the Measurement of 'Satisfaction' with Medical Care: Modifications in Content, Format and Scoring." Medical Care. (In Press.)

"Evaluation of Primary Medical Care in a Total Community: The Indicator Case Model." Paper presented to the Engineering Foundation Conference in South Berwick, Maine, August 1973. In press as part of the proceedings of the meeting.

(With J. A. Burdette, R. A. Babineau, F. Mayo, and J. C. Cassel) "The Evaluation of Primary Medical Care." Supplement to American Family Physician, February 1974, pp. 1-11.

(With L. L. Kupper, J. C. Cassel) "Statistical Considerations Based on an Instrument for Measuring Advisor Perceptions." British Journal of Mathematical and Statistical Psychology. (In Press.)

(With J. A. Burdette, R. A. Babineau, F. Mayo, and J. C. Cassel) "The Evaluation of Primary Medical Care." Journal of the American Medical Association. (In Press.)

Michel Ibrahim

(With J. C. Cassel, B. S. Hulka) "An Evaluation of Primary Medical Care." In An Introduction to Family Medicine. (In Press.)

(With J. G. Feldman, H. A. Sultz) "Differential Filial Aggregation of Coronary Risk Factors." Human Biology 45:541-552, 1973.

"The Role of Epidemiology in Traffic Injury." Proceedings of the North Carolina Symposiums on Highway Safety, Vol. IX Fall, 1973.

Sherman James

(With A. D. Shulman) "Undergraduate Community Psychology Work-Study Programs: Effects on Self-Actualization and Vocational Plans." American Journal of Community Psychology, Vol. 1, 2, pp. 173-181, 1973.

Berton Kaplan

"Psychiatric Sociology: Social Factors and Working Through." Perspectives on Psychiatric Sociology, Paul Roman and Harrison Trice (editors), New York:Science House, 1973.

"Speculations on the Health Consequences of Various Tennis Styles." Tennis Psychology, edited by C. Frazier, M.D., 1974.

Review of Culture and Personality by R. A. Levine, American Scientist, February 1974.

David Kleinbaum

"Testing Linear Hypotheses in Generalized Multivariate Linear Models." Communications in Statistics, Vol. 1, pp. 433-457, September 1973.

Lawrence Kupper

(With E. F. Meydrecht) "A New Approach to Mean Squared Error Estimation of Response Surfaces." Biometrika, Vol. 60, pp. 573-579, December 1973.

"Some Further Comments on Mean Square Error Estimation." Biometrische Zeitschrift, Vol. 15, pp. 343-344, January 1974.

"Minimax Designs for Fourier Series and Spherical Harmonics Regressions: A Characterization of Rotatable Arrangements." Journal of the Royal Statistical Society, Series B, Vol. 35, pp. 493-500, January 1974.

(With B. S. Hulka, J. C. Cassel) "Statistical Considerations Based on an Instrument for Measuring Advisor Perceptions." British Journal of Mathematical and Statistical Psychology. (In Press.)

(With E. F. Meydrech) "Experimental Design Considerations Based on a New Approach to Mean Square Error Estimation of Response Surfaces." Journal of the American Statistical Association, Vol. 69 (June 1974), (In Press.)

Anthony McMichael

(With R. Hetzel, M. A. Kidson) "The Psychological Health of University Students as Measured by a Personality Inventory." Aust. N. Z. J. Psychiat., 7:97, 1973.

Jack Medalie

(With H. A. Kohn, H. N. Neufeld, et al.) "Myocardial Infarction Among 10,000 Males over a Five-Year Period: II Association of Single Variables by Age and Birthplace." Journal of Chronic Diseases, 26, 329-349, 1973.

(With Z. Schlesinger, U. Goldbourt, et al.) "Pulmonary Ventilatory Function Values for Healthy Males Aged 45 years and over." Chest 63, 520-524, 1973.

(With F. C. Izsak, J. Engel) "Comprehensive Rehabilitation of the Patient With Cancer: Five Years' Experience of a Home-Care Unit." Journal of Chronic Diseases 26, 363-374, 1973.

(With C. Levine, C. Papier, et al.) "Blood Groups and Hypertension." Israel Journal of Medical Science 9, 8, 989-997, 1973.

(With A. J. Asch, D. L. Rabin, and A. Hurovitz) "Bronchial Asthma in an Israel Community: A Community Survey Using Primary Care Resources." Israel Journal of Medical Science 9, 8, 1014-1021, 1973.

(With M. Snyder, J. J. Groen, et al.) "Angina Pectoris Among 10,000 Men: Five-Year Incidence and Univariate Analysis." American Journal of Medicine 55, 5, 583-594, 1973.

(With F. C. Izsak, H. J. Brenner) "Screening for Early Detection: Incidence and Findings in Rural Settlements Over Eight Years." Preventive Medicine 3, 142-153, 1974.

Abdel Omran

Abdel R. Omran, editor. Egypt: Population Problems and Prospects. Chapel Hill, N. C.: Carolina Population Center, 1973.

"Health and Family Planning." World Health (January 1974), pp. 6-13.

"Health Implications of Family Planning." In S. A. Mallick, S. Rehman and V. Zaidi, eds., Proceedings of the WHO Seminar on Teaching of Family Planning in Medical Colleges, Nursing and L. H. V. Schools, at Dacca, 4-8 October 1971, pp. 67-121. Karachi: Pakistan Family Planning Council, 1973.

Abdel Omran (continued)

"Population Epidemiology: An Emerging Field of Inquiry for Population and Health Students." American Journal of Public Health, July 1974.

Community Medicine in Developing Countries: Theory and Practice. New York: Springer Publishing Co., 1974.

(With E. Kessel, J. Speidel, R. Bernard and R. Ravenholt) "International Fertility Research Program." Proceedings of the 7th World Congress, Tokyo and Koyoto, pp. 994-1002. Amsterdam: Excerpta Medica, 1973.

"The Dichotomy of Islam's Natality Design in an Epidemiological Context." Islam and Family Planning, 2 vols.; I. Nazer et al., Beirut: International Planned Parenthood Federation, 1973, Vol I, pp. 251-288.

(With K. F. Omran) "The Case for Permanent and Reversible Sterilization in Muslim Countries." Islam and Family Planning, 2 vols.; I. Nazer et al., eds. Beirut: International Planned Parenthood Federation, 1973, Vol II, pp. 430-439.

"Abortion in the Natality Transition in Muslim Countries." Islam and Family Planning, 2 vols.; I. Nazer et al., eds. Beirut: International Planned Parenthood Federation, 1973, Vol. II, pp. 353-374.

Cecil Slome

(With L. K. Comstock) "A Health Survey of Students: (1) Prevalence of Perceived Problems." Journal of American College Health Association, Vol. 22, p. 150, December 1973.

(With L. K. Comstock) "A Health Survey of Students: (2) Satisfaction, Attitudes, and Knowledge." Journal of American College Health Association, Vol. 22, p. 156, December 1973.

H. A. Tyroler

(With F. D. Fisher) "The Relationship Between Ventricular Premature Contractions on Routine Electrocardiography and Subsequent Sudden Death From Coronary Heart Disease." Circulation, 47:712-719, 1973.

(With H. Karp, A. Heyman, S. Heyden, A. Bartel and C. Hames) "Transient Cerebral Ischemia: Prevalence and Prognosis in a Biracial Rural Community." Journal of American Medical Association, 225:125-238, 1973.

(With R. Beaglehole, J. Cassel, A. Bartel, C. Hames and S. Heyden) "Racial Differences in Left Ventricular Hypertrophy in Response to High Blood Pressure in Evans County, Georgia." Circulation, 48: 4-24, 332, 1973.

(With A. Johnson, J. Cornoni, J. Cassel and C. Hames) "Race, Sex Differences in Blood Pressure Behavior in the Youth of Evans County, Georgia." Circulation, 48: 4-24, 332, 1973.

H. A. Tyroler (continued)

(With I. Krishan, C. Hames, C. Becker) "Prospective Study of Cord Blood Cholesterol to Predict Level of Cholesterol and Type II Hyperlipoproteinemia in Adolescence." III. International Symposium on Atherosclerosis, 95, 1973.

(With S. Heyden, A. Bartel, C. G. Hames) "Epidemiologic Outlook in Problems of Hypertriglyceridemia." 1972 European Medical Colloquium, pp. 37-43.

Edward Wagner

(With J. Schwankl, D. Davis) "The Stimulation of Public Involvement in Child Health Programs." (Abstract) Clinical Research, Vol. 22, 83A, 1974.

(With V. Hunt, A. Tyroler, and W. Grossman) "Criteria for the Diagnosis of Congestive Heart Failure." (Abstract) Clinical Research, September 28, 1973.

Carolyn Williams

(With F. C. Williams) "Values and Evaluative Research." Accepted for publication in 1974 by Health Care Dimensions, a handbook monograph series published by F. A. Davis Co.

(With G. V. Long, C. Whitman, M. S. Johannson, and R. W. Tuthill) "Evaluation of a School Health Program Directed to Children With History of High Absence: A Focus for Nursing Intervention." Accepted for publication in June or July by the American Journal of Public Health.

III. RESEARCH PROGRAMS

B. MAJOR RESEARCH ACTIVITIES IN PROGRESS

Individual Faculty Research Interests

Dragana Andjelkovic

Occupational Health Studies in the Goodyear Rubber Industries  
(mortality of workers in various plants 1964-1973)

Follow-up Study on a Cohort Basis of Rubber Workers Who Worked in  
Goodyear Akron Plant 1950-1973

Prevalence of Selected Chronic Conditions in the Gadsten Plant

Caroline Becker

Community Intervention Studies

Black-White Differences in Cholesterol Levels

Utilization of Health Facilities in Rural Guatemala

John Cassel

Effects of Rapid Culture Change on Health (Ponape)

Study of the Effectiveness and Efficiency of Primary Health  
Care

Evaluation of the Clinical Competence of Nurse Practitioners

Occupational Health Research Project

Joan Cornoni

Blood Pressure Differences in Youth

Religion Related to Risk Factor of Coronary Heart Disease

Stress Related to Risk Factors of Coronary Heart Disease

Adverse Drug Reactions to Anti-Hypertensive Treatment

Relationship of Alcohol Consumption to Risk Factor of Coronary  
Heart Disease

Felix Gruber

Occupational Health Studies Group: Rubber Industry Environmental  
Epidemiology



Carol J. Hogue

"Long Term Complications of Induced Abortions: Stochastic Models,"  
with R. H. Shachtman

"Epidemiologic Appraisal of the Association Between Induced Abortion  
and Prematurity," with A. R. Omran

"The Impact of Personal Characteristics on Post-Abortion Contraceptive  
Acceptance," with others

"Patterns of Abortion Practice Under Differing Legal Settings," chapter  
for the symposium volume on the Implications of the Legalization of  
Induced Abortion, Abortion Research Study Group, Carolina Population  
Center.

Barbara Hulka

Data analysis is currently in progress from the study on the Organiza-  
tion, Utilization and Assessment of Primary Medical Care. This study  
includes two phases; a household survey phase and an evaluation of patient  
care. Data collection in Fort Wayne, Indiana was completed in September  
1973. Analysis has been initiated on the patient phase of the study, and  
analysis will start this spring (1974) using the household survey data.

Michel Ibrahim

Evaluation of Clinical Decision-Making and Quality of Medical Care, with  
special reference to the Family Nurse Practitioner

Determinants of Discharge Diagnosis of Hospitalized Stroke Patients

The Effect of Group Psychotherapy Upon the Prognosis of Patients With  
Acute Myocardial Infarction

Strategies for Improving Compliance Among Hypertensive Patients

Sherman James

"The Effects of the Race of the Experimenter and Race of Comparison  
Norm on Social Influence in Biracial Cooperative Problem-Solving Dyads."  
Submitted for publication to the Journal of Personality and Social  
Psychology

(With Herman A. Tyroler) "Cardiovascular Disease Mortality in North  
Carolina: White-Nonwhite Contrasts, 1960-1970." Data collection and  
analysis phase.

(With C. David Jenkins, Earnest Harburg, Russel Boxley and  
Steven Zyzanski) "An Exploration of Socio-Psychological Factors in  
Essential Hypertension." Pilot study phase.

(In collaboration with selected Department of Biostatistics personnel)  
"The Efficacy of Sodium Cyanate in the Treatment of Sickle Cell Anemia:  
A Controlled Clinical Trial." If the grant is approved, I will be  
responsible for the neuropsychological testing component of the study.

Berton Kaplan

Social Support in Health

Evans County Sociological Analysis

Study of Peer Group Psychotherapy

Study of Psycho-Social Precursors to Stroke

Job Satisfaction and Health

David Kleinbaum

Occupational Health Study of Rubber Industry

Ponape Project

International Fertility Control Research Project (with Carol Hogue and Abdel Omran)

Writing textbook: "Regression Analysis and Other Multivariable Techniques With Applications to the Biomedical and Health Sciences", (estimated completion date - September 1975)

Development of Registry of Black Statisticians in the United States

Statistical Consultant for UNC Office of Student Affairs

Survey of Minority Students at Several Colleges Throughout North Carolina

Investigating Methods for Developing Learning Activity Packages for Teaching Beginning and Intermediate Level Biostatistics Material (e.g. programmed instruction, transparencies, etc.)

Investigating Through a Literature Search the Feasibility of Developing a Research Proposal for the Study of the Effectiveness of Accupuncture in the Treatment of Disease or as an Analgesic (i.e. anesthetic)

Report on 1972 Survey of Minority Students at UNC (accepted for publication in 1975 by the Journal of Negro Education)

Richard McDonagh

Blood Coagulation Factor XIII Levels of High and Low Risk CHD Subjects, Evans County Study

Anthony McMichael

Occupational Health Studies Group: Rubber Industry Environmental Epidemiology

Jack Medalie

Analysis of Result of a Long-Term Prospective Study of Ischemic Heart Disease and Related Subjects, i.e. Myocardial Infarction - Clinical Myocardial Infarction - Silent (Unrecognized), Angina Pectoris, Diabetes Mellitus, Weight/Height ratios, Peptic Ulcer.

Abdel Omran

WHO Collaborative Study: This is an ongoing study of the impact of family formation on family health. The study has been initiated in 9 countries, each of which receives an individual grant from WHO. Dr. Omran is the designer and coordinator of the study. Currently analysis is being undertaken for data from five countries (Philippines, India, Iran, Turkey and Lebanon).

Epidemiology of Human Reproduction in Taiwan: These are studies conducted in collaboration with the Institute of Maternal and Child Health in Taichung and deal with pregnancy outcome, birth order and I.Q., abortion, etc.

The Epidemiologic Transition in North Carolina: An application of the theory of epidemiologic transition to data from North Carolina has been in progress for two years. Two working papers have been developed.

The Arab-East Population Project: This is an ongoing study of population profiles in the Arab countries sponsored by AID and will end in a Conference in Beirut in 1975.

Ralph Patrick

Culture Change and Blood Pressure and Heart Disease (Ponape)

Health Consequences of Rapid Cultural Change (Papago Indian)

Carl Shy

Regional Environmental Study: An investigation to the environmental consequences of alternative modes of growth in energy generation, transportation, use of water resources and land use in the Piedmont area of North Carolina.

Cecil Slome

Finalization and Reporting on Second Phase of Midwife Evaluation Study in Mississippi - Developing a Predictive Model for Undesirable Outcomes in Low Risk Maternity Patients

Determining Feasibility of Carrying on a Study of the Association Between Cancer of the Cervix and Cancer of the Prostate

Extending the Analysis and Reporting on (With Carol Carroll) the Health Needs of the Elderly in Edgecombe County

H. A. Tyroler

Chairman of the Epidemiology Committee of the Lipid Research Center Program, an international, twelve clinic cooperative study. We are designing large population based studies of lipoproteins and cardiovascular disease.

Epidemiologic coordinator for the Occupational Health Studies Group. This is a large scale, multidisciplinary study of the health consequences of working in the rubber industry.

Development of a N. C. Stroke Watch collaboratively with Duke University to study the incidence and case fatality of stroke in areas of North Carolina.

The Evans County Cardiovascular Studies - a twenty year surveillance of a total, rural biracial community has led to more than fifteen current research projects which are coordinated by epidemiologists at the University of North Carolina.

The National High Blood Pressure Detection and Treatment Program - member of the coordinating medical care committee.

Edward Wagner

Clinical Decision Making and Quality of Care

Medical Consultation

Health Center Utilization

Controlled Clinical Trials

Carolyn Williams

Assessing Competence of Family Nurse Practitioners: The basic objective of the project is to develop and pre-test methodology which can be used in assessing the competence of practicing family nurse practitioners. Competence has been conceptualized to include two dimensions: (a) the CURE dimension, where the focus is on examining the appropriateness of medical decision-making and (b) the CARE dimension, which is viewed as having two key components, Quality of Patient-Oriented Communication and the Degree of Family Orientation.

The approach to studying medical decision-making utilizes the chart as the data source; criteria for judging decision-making are being developed employing data obtained from a national sample of physicians. Methodology being developed for looking at the CARE dimension involves a revision and elaboration of an approach initially developed by Hulka, et al. to study patient-provider congruence. Both patients and providers are data sources.

Carolyn Williams (continued)

At this time the methods are still under development; data acquisition has been limited to (a) obtaining responses of a national sample of general practitioners and pediatricians to a standards of care questionnaire and (b) developmental pre-testing of methods.

The Family Nurse Practitioner in North Carolina: An Analysis of the Relationship Between Practice Setting Characteristics, Scope of the Family Nurse Practitioner Role, and Autonomy in Decision-Making: The overriding emphasis in this project has been to develop a descriptive and analytical approach to studying (1) the evolution of the family nurse practitioner role after completion of the training program, and (2) the influence of practice setting characteristics on role development. The two dimensions of role development on which the study is focused are: scope of FNP practice and autonomy in clinical decision-making. Using interviews and mailed questionnaires, data have been obtained on all FNP graduates of the Chapel Hill training program, physician preceptors, and others affiliated with the practice settings in which FNP's are functioning.

To date considerable effort has been expended in instrument development and data acquisition: data analysis involving 38 FNP graduates in 25 North Carolina settings in in progress.

The Training Program in Epidemiological Foundations of Evaluation in Health Services: My efforts in this endeavor are directed to facilitating the completion of the eight evaluation projects undertaken as part of the program and developing a monograph based on program materials. The monograph is intended as a mechanism for sharing the experience with a wider audience.

### III. RESEARCH PROGRAMS

#### C. MAJOR RESEARCH ACTIVITIES IN PROGRESS

##### Departmental Research Programs

##### Epidemiology in Population Dynamics and Family Planning

The Carolina Population Center in collaboration with the Department of Epidemiology has developed a special curriculum which explores and defines the roles that epidemiology needs to make to the field of Population Dynamics and Family Planning. The necessary curriculum required for the appropriate modification of the education of epidemiologists in this area has led to programs which are based primarily in the School of Public Health, utilizing many of the departments of the school as well as a variety of departments within the University.

##### Environmental Epidemiology

The increasing rate of technological innovation, including the development of new products of unknown toxicity, has created an urgent need for new research strategies and new types of research scientists.

The graduates of this training program will be new scientists in this field. They will be Ph.D.'s in Environmental Epidemiology, individuals sophisticated in the principles and perspectives of epidemiology and biostatistics, well trained in human biology and the environmental sciences and with knowledge and a sensitive awareness of the contributions of the behavioral sciences. Such individuals though primarily epidemiologists (rather than laboratory scientists) should be capable of recommending the necessary laboratory experiments that should be conducted to refine or refute the clues developed from epidemiological studies, and subsequently test some of these new laboratory findings again in free living human population.

##### Health Services Research

The Department of Epidemiology is offering a graduate research training program in the field of Health Services Research. The objectives of the program are to provide educational experiences useful in:

1. Community diagnosis and the assessment of health needs as well as health demands.
2. Distribution and determinants of the utilization of health services and compliance with the care offered.
3. Measurement of the effectiveness, efficiency, and the quality of health delivery systems.
4. Organization of epidemiologic information systems; data collection, storage, retrieval; data management; analysis; record linkage.

### Health Services Research (continued)

This program is particularly designed for professional health workers (physicians, nurses, dentists, and veterinarians), and social scientists.

The curriculum is flexible, and designed to provide each student with competence in those skills and concepts to help solve the major problems in his own field of interest related to the delivery of health services.

In conjunction with the UNC Health Services Research Center, special emphasis is placed upon field opportunities in private practices, satellite clinics; neighborhood health centers, hospital out-patient departments and other medical care systems to conduct research in the planning and evaluation of the delivery of health services.

### Research Training Program in Alcohol Abuse

This program is to train persons in the design, organization, implementation and methods of analysis of studies related to the use of alcohol.

The problems related to the use of alcohol may be classified into numerous fields. These related fields include medicine, psychiatry, psychology, sociology, social work, pharmacology, education, epidemiology, biostatistics and others. However, these problems do not exist in mutually exclusive categories but instead are complex interactions of factors in the many different areas. This program is designed to study the resultant health effects related to the consumption of alcohol in terms of biological, sociological, and cultural differences.

### Clinical Epidemiology

The large mutual territory between the clinical disciplines with their concern for the individual patient, and epidemiology, requires professionals trained in both areas. The program in Clinical Epidemiology is designed for trained clinicians desiring training and experience in the substantive and methodologic questions relating to the diagnosis, prognosis, and treatment of diseased populations. A limited continuing practice experience will be considered an integral part of the student's activities so that the clinical relevance in his research and teaching can be maintained.

### The Residency Program in Preventive Medicine

This three-year program is specifically designed for physicians who wish to obtain board qualification in Preventive Medicine. Applicants must be acceptable both to the Department of Epidemiology and to the Department of Preventive Medicine in the School of Medicine. One year is devoted to the M.P.H. program, one year to additional clinical work and one year to research.

#### IV. Public Service Programs

##### A. List of Activities

###### Scientific Papers Presented

###### Cassel, John

"Measurements of the Effectiveness and Efficiency of Primary Health Care" presented in Tel Aviv, 1974.

###### Hulka, Barbara

"Evaluation of Primary Medical Care in a Total Community: The Indicator Case Model," presented to the Engineering Foundation Conference in South Berwick, Maine, August 1973.

"Medication Use and Misuse: Physician-Patient Discrepancies," presented to the 101st Annual Meeting of the American Public Health Association in San Francisco, California, November 4-8, 1973.

"Doctor-Patient Communication and Outcomes Among Diabetic Patients," presented to the American Diabetes Association in Philadelphia, Pennsylvania, January 26, 1974.

"Doctor-Patient Communication and Outcomes Among Diabetic Patients," to be presented to the Society for Epidemiological Research in San Francisco, California, June 20, 1974.

###### Kleinbaum, David

"Black Statisticians in the US - Low Supply for High Demand," presented at the 1973 Joint Statistical Meetings of Allied Societies, New York, December 27, 1973.

###### Kupper, Larry

(with E. F. Meydrecht) "A New Approach to Mean Square Error Estimation of Response Surfaces: Multivariable Considerations," presented at the 39th Session of the International Statistical Institute in Vienna, Austria, August 20-30, 1973.

(with P. A. Lachenbruch and R. W. Helms) "Some Problems in the Use of Regression Analysis in Public Health," presented at the 101st Annual Meeting of the American Public Health Association in San Francisco, California, November 4-8, 1973.

(with B. S. Hulka et al) "Medication Use and Misuse: Physician-Patient Discrepancies," presented at the Second Annual Wade Hampton Frost Lecture and Plenary Session of the 101st Annual Meeting of the American Public Health Association in San Francisco, California, November 4-8, 1973.



(with A. J. McMichael and R. Spiritas) "Statistical Considerations Based on a Type of Design Useful in Epidemiological Studies of Occupational Health," presented at the Session on Statistics in Environmental Research at the 133rd Annual Meeting of the American Statistical Association in New York, December 27-30, 1973.

"Statistical Aspects Concerning the Assessment of Occupational Health in the Rubber Industry," presented at the Joint Meeting of the North Carolina Chapter of the American Statistical Association and the Statistics and Epidemiology Section of the North Carolina Public Health Association, National Center for Health Statistics in Research Triangle Park, North Carolina, March 27, 1974.

McMichael, Anthony

(with L. Kupper and R. Spiritas) "Statistical Considerations Based on a Type of Design Useful in Epidemiological Studies of Environmental Health," presented to the American Statistical Association in New York, December 1973.

(with L. Kupper and R. Spiritas) "Epidemiologic Study of Mortality within a Cohort of 7000 Rubber Workers, 1964-1972," presented to the American Industrial Health Conference in Miami, Florida, April 1974.

Omran, Abdel

"Ibn Khaldun: An Arab Forerunner of Malthus," presented at the First Regional Population Conference, U.N. Economic Commission for Western Asia in Beirut, 1974.

"Epidemiological Aspects of Contraceptive Sterilization. I. Use-Prevalence and Acceptability (Societal and Individual)," HR/SG/ARE/73.6. Geneva: World Health Organization, 1973.

"Epidemiological Aspects of Contraceptive Sterilization. II. Use-Effectiveness, Safety, Reversibility and Feasibility of Vasectomy," HR/SG/ARE/73.7. Geneva: World Health Organization, 1973.

"Epidemiological Aspects of Contraceptive Sterilization. III. Use-Effectiveness, Safety, Reversibility and Feasibility of Female Sterilization," HR/SG/ARE/73.8. Geneva: World Health Organization, 1973.

"An Assessment of the Use-Effectiveness, Side Effects, Acceptability and Feasibility of Intrauterine Devices," HR/SG/ARE/73.9. Geneva: World Health Organization, 1973.

"An Assessment of the Use-Effectiveness, Acceptability, Safety and Feasibility of Oral Contraceptives," HR/SG/ARE/73.10. Geneva: World Health Organization, 1973.

"Epidemiological Aspects of Population Change in the Arab World," presented at the First Regional Population Conference, U.N. Economic Commission for Western Asia, Beirut, 1974.

Tyroler, H. A.

"The Challenge for Epidemiology in Health Care in North Carolina," presented at the Biostatistics - Epidemiology Section of the North Carolina Public Health Association Meeting in Raleigh, September 26, 1973.

"Racial Differences in the Prevalence of Hypertensive Heart Disease," presented to the 46th Annual Meeting of the American Heart Association in Atlantic City, New Jersey, November 8-11, 1973.

"Collaborative Mortality Studies in the Rubber Industry Based on the University of North Carolina's and Harvard's Data," presented at the United Rubber Workers Special Health and Safety Seminar in Washington, D.C., April 9, 1974.

Wagner, Ed

(with Elizabeth Steel) "Health Care Experience and Appointment Keeping," presented to the Biostatistics - Epidemiology Section of the North Carolina Public Health Association in Raleigh, September 27, 1973.

Extra-departmental Activities

a. Members of the Department of Epidemiology participate in many special activities such as off-campus degree programs, workshops, seminars and special programs. Currently, many faculty members are working in cooperation with the School's Continuing Education Service in teaching short courses to meet the educational needs of health workers throughout the state and region.

b. Area Health Education Center

During the past year, the activities of the School's involvement in the AHEC project have been considerably broadened and implemented. To carry out the aims of the AHEC project, it is necessary to work closely with the other members of the branches of the Division of Community Health Services; the School's activities in the AHEC areas of the state have placed emphasis on technical assistance and student placement. Activities have included identification of needs of health departments and hospitals within the AHEC areas, and meeting those needs in cooperation with DCHS and the various departments of the School. The School of Public Health works in liaison with other health science schools in the University leading to enhancement of interdisciplinary student and faculty learning.

c. Family Nurse Practitioner Workshop

During the latter part of February 1974, the staff of the Family Nurse Practitioner Project of the Department of Epidemiology hosted a meeting of research teams from the University of Connecticut Health Center and Indiana University. All three groups have engaged in

evaluative research of nurse practitioners. The primary objective of the Indiana Program is an evaluation of the nurse practitioner training program including the determination of the impact of the nurse practitioners on the recipients of care. The primary interest of the team from the University of Connecticut is the development of a method for monitoring the quality of care provided by nurse practitioners. In conjunction with these two approaches, the Department of Epidemiology presented current efforts to evaluate competency of nurse practitioners.

## V. FACULTY ORGANIZATION

### A. Faculty

John C. Cassel, M.B.B.Ch., M.P.H., Professor and Chairman  
(On Sabbatical)  
Dragana Andjelkovic, M.D., M.P.H., Dr.P.H., Assistant Professor (joint)  
Caroline Becker, M.D., Assistant Professor  
Frank Cordle, M.P.H., Ph.D., Assistant Professor  
Joan C. Cornoni, M.P.H., Ph.D., Assistant Professor  
Mary Daly, M.S.P.H., Ph.D., Instructor  
John T. Fulton, D.D.S., Professor Emeritus  
Felix J. Gruber, M.D., Dr.P.H., Assistant Professor  
Barbara S. Hulka, M.S., M.D., M.P.H., Associate Professor  
Michel A. Ibrahim, M.D., M.P.H., Ph.D., Professor and Acting  
Chairman  
Sherman A. James, Ph.D., Assistant Professor  
Berton H. Kaplan, M.S., Ph.D., Professor  
David Kleinbaum, Ph.D., Assistant Professor (joint)  
Lawrence L. Kupper, Ph.D., Assistant Professor (joint)  
Eugene S. Mayer, M.D., Assistant Professor (joint)  
Richard P. McDonagh, Jr., M.A., Ph.D., Assistant Professor (joint)  
Anthony J. McMichael, M.D., Ph.D., Assistant Professor  
Abdel R. Omran, M.D., D.P.H., M.P.H., Dr.P.H., Professor  
Ralph C. Patrick, Jr., A.M., Ph.D., Associate Professor  
Samuel M. Putnam, M.D., Assistant Professor (joint)  
Carl M. Shy, M. D., Dr.P.H., Lecturer (joint)  
Cecil Slome, M.B., Ch.B., D.P.H., Professor  
Herman A. Tyroler, M.D., Professor  
Edward H. Wagner, M.D., M.P.H., Assistant Professor (joint)  
Carolyn A. Williams, Ph.D., Assistant Professor (joint)

### Visiting Faculty

Jack H. Medalie, B.Sc., M.B., B.Ch., M.P.H., Visiting Professor

### Other Academic Personnel

Carol J. Hogue, M.P.H., Ph.D., Research Associate  
Jo E. Maready, B.A., Research Associate  
James E. Schwankl, M.D., Research Associate  
Susanne Wolf, M.P.H., Research Associate  
*Carol Connell, M.P.H., Research Associate*

### B. Full Time Faculty Appointments and Resignations

#### Additions

Dragana Andjelkovic, M.D., M.P.H., Dr.P.H., Assistant Professor	07-01-73
Mary Daly, M.S.P.H., Ph.D., Instructor	08-01-73
Carol J. Hogue, M.P.H., Ph.D., Research Associate	09-01-73
Sherman A. James, Ph.D., Assistant Professor	08-01-73
Jack H. Medalie, B.Sc., M.B., B.Ch., M.P.H., Visiting Professor	09-01-73
Carl M. Shy, M.D., Dr.P.H., Lecturer	01-01-74

Promotions

Michel A. Ibrahim, M.D., M.P.H., Ph.D., Professor  
Cecil Slome, M.B., Ch.B., D.P.H., Professor

10-01-73  
01-01-74

Resignations

A. Wouter Voors, M.D , M.P.H., Dr.P.H., Associate Professor

C. Proposed Additions to Faculty

None

D. Special Achievements of Faculty

Hogue, Carol J.

Membership in Delta Omega, 1973

First Annual Award for Excellence, awarded by the Statistics and  
Epidemiology Section, North Carolina Public Health Association,  
1973

Kleinbaum, David

Award of recognition by the Black Student Caucus of SPH for contri-  
butions to human rights

Recruitment of BIOS Department's first two black faculty

Instrumental in creation by the American Statistical Association of an  
Ad Hoc Committee on Minorities in Statistics

Wrote report adopted by Faculty Council which promoted several  
recommendations on behalf of minorities at the university level

Shy, Carl

Appointed to the Panel of Nitrogen Oxides of the National Academy of  
Sciences, January 1, 1974

Williams, Carolyn

Received the Public Health Nursing Section's Young Practitioner Award,  
November 1973, at the Annual Meeting of the American Public Health  
Association

Participated in a conference of Schools of Public Health in Latin  
America, held in Lima, Peru, as a short-term consultant to the  
Pan American Sanitary Bureau of the World Health Organization on  
Graduate Preparation in Public Health for Nurses, February 1974

E. Special Assignments of Faculty

Becker, Caroline

Consultant, Home Health Agency, Carrboro-Chapel Hill  
Member, SER and APHA and NCPHA  
Member, Health Sciences Library Committee  
Chairman, SPH Library Liaison Committee  
Member, EPID Admissions Committee  
Member, EPID Student Affairs Committee

Cassel, John

Leave of Absence from August 1973 - August 1974. Research activities involve biomedical parameters of social and cultural change.  
Lecturing at Wellington Hospital, Wellington, New Zealand and St. Thomas Hospital, London, England.

Cornoni, Joan

Chairman of Statistics and Epidemiology Section of NCPH Association, September 1972 - September 1973  
Member of Nominating Committee NCPHA, September 1973 - September 1974  
Member of Traineeship and Fellowship Committee, School of Public Health, 1971 - 1974  
Secretary of SPH Alumni Association, April 1974 -

Gruber, Felix

Consultant for the Research Triangle Institute  
Consultant for the Carolina Population Center  
Member of the Latin American Policy Advisory Committee, CPC  
Member of the Computer and Data Processing Advisory Committee, SPH  
Member of the Doctoral Committee of four students  
Coordinator of the Epidemiology Seminars, SPH

Hogue, Carol

Staff Epidemiologist, International Fertility Research Project

Hulka, Barbara

Chairman, Human Research Review Committee, School of Public Health  
Chairman, Admissions Committee, Department of Epidemiology, School of Public Health  
Member of Health Services Developmental Grants Study Section, Bureau of Health Services Evaluation, HEW  
Member of the Editorial Board of Community Health  
Member of Epidemiology Section Council, American Public Health Association  
Member of Executive Committee, Society for Epidemiologic Research

Ibrahim, Michel

Member, National Health Education Committee, The American Public Health Association  
Member, The Epidemiology Award Committee, The Epidemiology Section, The American Public Health Association  
Reviewer, Prize Paper, Society for Epidemiological Research

James, Sherman

Department representative to Minority Relations Committee  
Member, Human Ss Research Review Committee

Kaplan, Berton H.

Visiting Scholar, American Anthropology Association  
Chairman, McGavran Committee on Teaching Excellence  
Consultant, Research Advisory Committee, American Nurses Foundation, American Nurses Association, 1970 - present  
Consultant, National Science Foundation, Project Reviewer, Social Psychiatry, 1974 -  
Member, American Sociological Association (Fellow)  
Member, American Anthropological Association (Fellow)  
Member, Southern Sociological Society (Section Chairman, Sociological Studies in Low Income Areas, 1965; Section Chairman, Sociology of Law, 1967)  
Member, American Public Health Association  
Member, North Carolina Public Health Association  
Member, American Association of University Professors  
Member, American Association for the Advancement of Science  
Member, Society for the Scientific Study of Religion  
Member, Society for the Psychological Study of Social Issues  
Member, Society for the Sociological Study of Social Problems  
Member, Southern Anthropological Association

Kleinbaum, David

Chairman, Chancellor's Committee on the Status of Minorities and Disadvantaged  
Member, Minority Relations Committee  
Chairman, Department of Biostatistics Committee on Opportunities for Minorities (for recruitment of minority faculty and students in Biostatistics)  
Development of Registry of Black Statisticians in U.S.  
Member, American Statistical Association's Ad Hoc Committee on Minorities in Statistics

Kupper, Lawrence L.

Co-chairman of the American Statistical Association Committee on  
Statistics in Sports and Competition

McDonagh, Richard P.

Advisor, Primary Heart Disease Project  
Advisor, Evans County Study

Jack H. Medalie

Invited to Lecture at:

American Heart Association Annual Meeting  
Cardiovascular Epidemiology Annual Meeting  
University of Rochester Medical School  
University of Miami Medical School  
University of California (San Francisco) Medical School  
McMaster University Medical School (Canada)  
University of Western Ontario Medical School (Canada)  
University of Wisconsin Medical School  
Harvard University School of Public Health  
University of South Carolina Medical School (Charleston)

Omran, Abdel

Participant in select group to plan conference on the "Physician and the Population Problem" to be held in Stockholm this summer  
Participation in off-campus M.P.H. program  
Participation in Javeriana University Project (Columbia) by invitation from UNC  
Consultation with WHO and UNFPA for epidemiology in human reproduction

Patrick, Ralph

Member, Human Research Review Committee, School of Public Health  
Member, Minority Relations Committee, School of Public Health  
Member, Minority Advisory Committee, School of Public Health  
Senior Faculty Associate, Department of Anthropology

Shy, Carl

Appointed Director, Institute for Environmental Studies, UNC,  
January 1, 1974.  
Appointed Lecturer, Department of Epidemiology, School of  
Public Health, January 1, 1974

Slome, Cecil

Consultant to National Heart & Lung Institute related to  
studies of chronic obstructive pulmonary disease



Tyroler, H. A.

Program Director, Environmental Epidemiology Research Training Program, School of Public Health, National Institute of Environmental Health Sciences

Program Director, Cardiovascular Undergraduate Training Grant  
Co-Director, Preventive Medicine - Epidemiology Residency Program,  
School of Medicine and School of Public Health

Member, Faculty Council

Member, Curriculum Committee

Member, Academic Affairs Committee

Member, Cancer Committee, School of Medicine and School of Public Health

Coordinating Epidemiologist, Member, of Advisory Board, Occupational Health Studies Project, School of Public Health

Williams, Carolyn

School of Nursing Committee Appointments:

Research Committee, Chairman

Ad Hoc Committee on Faculty Governance

(Note: This committee has been charged with studying the School of Nursing's Organizational Structure and will make recommendations for reorganization within the month.)

Admissions Committee, Family Nurse Practitioner Program

Steering Committee for a Southern Regional Education Board sponsored project based in the School of Nursing and entitled: Continuing Education in Nursing Research: A Regional Approach to Faculty Research Development

Appointed by the Dean of the School of Public Health to two committees:

Search Committee for Chairman of Public Health Nursing Department

Ad Hoc Committee on Joint (with School of Nursing) M. S.

Curriculum to prepare teachers of Public Health Nursing.

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

### Educational Philosophy

The philosophy guiding the educational program in this department holds that it is no longer feasible or desirable to attempt to teach all the known facts in any given discipline; unfeasible because there are too many facts to be remembered and undesirable because many of them may change tomorrow. If such an assumption is true for any single discipline, it is obviously even more valid in a department which is attempting to integrate many of the diverse sciences of man (particularly the biological and a number of the behavioral sciences) for the study of the phenomena of health and disease in social groups.

Accordingly, the faculty has accepted the fact that many students will graduate with gaps in their knowledge, and that a fixed or required curriculum no longer makes educational sense. Thus, beyond the few courses required by the school, the department has no fixed requirements. In lieu of such requirements there is an expectation that as rapidly as is possible, each student in consultation with his advisor will specify a series of issues or concerns that are central to his or her interests. It is then the responsibility of the faculty, together with the student to delineate the competencies that will be required to resolve these issues. Finally the faculty have the responsibility of indicating to the student the various options open to obtain such competencies. These can include formal courses within and outside the department, informal seminars, directed reading, participation in an ongoing departmental research, exploration of data sets available within the department and participation in clinical activities.

The major evidence required that a student has benefited from such an experience is documentation through a research project that the original issue has been resolved (usually this would apply to doctoral candidates) or in the case of masters candidates, the development of viable approaches which if applied could resolve the issue.

### Minority Recruitment

Proposed Short Course in Epidemiology. In order to remedy the scarcity of black professionals with special training and expertise in the field of epidemiology we propose a one-week course in this area. The major objective of the course will be to inform and intrigue potential groups about the contributions of epidemiology to the advancement of knowledge and the planning and evaluation of health services. The methods, concepts, and principles of epidemiology will be presented in order to advance the understanding of the processes which contribute to good and ill health in various population segments.

Emphasis will be placed on diseases which are prevalent among blacks such as hypertension, strokes, and sickle-cell disease. Comparisons among various ethnic groups will help identify the various life styles which are associated with ill health. The use of this information in disease prevention will be outlined. The major thrust of the course will be to show, with actual examples, how epidemiologists address themselves to various health issues, and what kind of solutions can be proposed.

Students enrolled in such a course would leave with an appreciation of the contribution of epidemiology to various health problems, and would hopefully become interested enough to continue in the field as graduate students or post-doctoral fellows, therefore, enlarging the eligible pool of black professionals in epidemiology for the purpose of future recruitment in schools of public health or departments of preventive medicine.

About 25-30 blacks with terminal professional degrees, (MD's, nurses, dentists, sociologists, psychologists, etc.) will be invited to attend the course. Nominations will be requested from various institutions in the Southeastern Region. The best candidates will be selected. Several of the Epidemiology Department's faculty will participate in the planning and conduct of this short course. Pertinent educational materials will be developed and distributed in advance before students come to the program.

A week in early December 1974, is a possible target date. The exact time has to be negotiated and the best suitable date will be chosen. The course can be given either in the School of Public Health facilities, or in an equivalent facility somewhere in the state or the region.

Faculty Development Plan. A major problem in implementing our department's Affirmative Action Plan is the scarcity of black professionals with special training and expertise in the field of epidemiology. On the basis of faculty discussions, the following suggestions were proposed to hopefully increase the number of black professionals in epidemiology:

1. Blacks with terminal professional degrees (MD's, nurses, dentists, sociologists, psychologists, etc.) will be actively encouraged to enroll in the master and/or doctoral program.

2. Black medical students may spend their elective year in our department to obtain an M.P.H. Several medical students from UNC and Duke have already been in such a program. The task now is to attract black medical students to do the same.

3. Graduate students in other departments on campus such as anthropology, psychology, and sociology will be encouraged, whenever appropriate, to combine epidemiology with their current studies especially when working on a dissertation topic which focuses on a health problem.

4. Visits by our faculty to black colleges and universities, especially those in North Carolina, to offer lectures and seminars on relevant topics in epidemiology.

### Goals and Trends

Several members of the Department participate and conduct service programs to agencies in North Carolina. Examples of such agencies include the North Carolina Heart Association, the North Carolina Department of Correction, the Medical Examiner's Office and numerous health departments throughout the state.

The establishment of the Division of Community Health Services within the School of Public Health, and the growth of the University's AHEC program allow the Department of Epidemiology to provide services to many agencies. In the past year there has been an evaluation of outreach programs in response to requests from North Carolina practitioners in the western part of the state. One faculty member is a consultant for Home Health Agency, with particular emphasis on utilization review. These mechanisms help the department in deploying manpower resources more efficiently.

The department intends to continue and expand its public service programs.