

University of North Carolina
Chapel Hill



POPULATION PROGRAM

- RESEARCH
- EDUCATION
- SERVICE

Carolina Population Center

500 Pittsboro Street
Chapel Hill, North Carolina 27514

A PROGRAM OF RESEARCH, EDUCATION, AND SERVICE

The rational use of mankind's reproductive powers poses one of the greatest challenges in the world today. Recognizing this problem as most fundamental to the future of humanity, the University of North Carolina at Chapel Hill has developed a program of population studies which mobilizes the resources of the entire University.

The program is distinguished by its breadth of approach. It brings to bear on this complex subject the insights of many different academic disciplines; it fosters close relationships between those concerned with basic population research and those concerned with training for professional service in family planning programs; and it maintains close contact with public agencies and with the realities of human community situations.

The University

Chartered in 1789, the University of North Carolina is the nation's oldest state-supported university. It now has branches in Chapel Hill, Greensboro, Charlotte, and Raleigh; together these comprise a consolidated university system, though each branch institution has a separate faculty and student body.

The University at Chapel Hill is ideally situated for purposes of population research. Duke University in Durham, N. C., lies within ten miles of Chapel Hill; the State University at Raleigh is less than 30 miles away. The three universities together define an area known as the Research Triangle.

Within the Triangle area are located the Center for Environmental Health Sciences of the U. S. Public Service, a branch of the National Center for Health Statistics, and many other research establishments. A computer research center and an IBM 360 computer facility are also available to the University.

The Chapel Hill campus has rich library resources. The main University library is a depository center for U. S. Government and United Nations documents, and the student of population has access both to specialized collections in the University's graduate schools and academic departments and to libraries of nearby institutions. Also located at Chapel Hill are the Institute for Research in Social Science,

DIRECTOR OF CAROLINA POPULATION CENTER

MOYE W. FREYMANN, *Professor of Public Health Administration*

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JOHN B. GRAHAM, *Alumni Distinguished Professor of Pathology, Chairman*

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the Institute of Government, and the Center for Urban and Regional Studies.

Other University resources include a new \$6 million Center for Child Development and a \$17 million Center for Research in Pharmacology and Toxicology, both of which will have major research programs related to reproductive physiology.

The State

North Carolina's population includes groups with widely diverse cultural and economic characteristics. Over half the people live in rural, farming areas. Studies on aspects of population dynamics in the state have been carried out over the last 40 years, so that accurate and comprehensive information is available from a number of sources. For example, a recent statewide study added considerable information about socioeconomic characteristics, fertility, and current contraceptive practices of the population.

North Carolina is a pioneer in the health and welfare field. It was the nation's first state to offer family planning services through tax-supported public health facilities—at a time when such a step required considerable courage and foresight. The state has likewise received national recognition for its anti-poverty program, developed under the auspices of the North Carolina Fund. One of the earliest and largest efforts of its type, this program is also concerned with family planning as a critical factor in the cycle of poverty. State health and welfare officials at various levels, as well as medical societies, educators and others, are currently engaged with further development of comprehensive family planning services in the state. The Population Center is an active partner in these efforts.

THE PROGRAM

Policy Board

The Population Program has a university-wide advisory and policy-making board to offer guidelines for activities of the Population Center and foster departmental involvement in research, teaching, and service. The Policy Board is largely comprised of chairmen of the University departments most immediately concerned with population studies.

Carolina Population Center

The Population Center coordinates and stimulates population studies within individual departments of the University, supports special study group activities, and provides population reference services. It directly sponsors certain activities where close interdisciplinary teamwork is essential, such as special training or research seminars, and it maintains relationships with field service programs.

The Center's professional staff all hold faculty appointments in University departments and serve as "bridges" between the Center and population-related disciplines within the University.

In collaboration with the Department of Radio, Television, and Motion Pictures, the Center is developing a Family Planning Education Materials unit which will serve both as a clearinghouse for existing audiovisual materials and as a facility for development of new public education and professional training materials in family planning.

Study Groups

Further coordination of faculty interests is achieved through special "study groups"—or continuing faculty seminars—on different aspects of the total population field. These groups bring the insights of different disciplines to focus in a specialized area in order to identify gaps in knowledge, develop new concepts, and stimulate further research and training activities.

Six areas are the current objects of Study Group attention:

- Population Theory and Problems of Measurement
- Demography and Economics of Population
- Reproduction and Contraception
- Population Policies
- Community Action Program Development
- Family Life Education

Area Concentrations

The Carolina Population Center maintains close relationships with several geographic areas in the world where there is strong interest in population studies and family planning programs. This type of concentration makes it easier to keep in touch with

the dynamics of population change now occurring among population groups of widely different social and economic characteristics. It will also enable the Carolina Center to fulfill an obligation to serve and support selected population and family planning program efforts.

Relationships with these areas involve continuing professional contact with institutions and agencies in the area, faculty exchanges, and provision of training and consultation services.

Area concentrations so far adopted are:

- The State of North Carolina
- India
- Thailand
- United Arab Republic

The Center hopes to have an additional area of concentrated interest in Latin America.

GRADUATE AND POST-DOCTORAL STUDIES

The University of North Carolina offers a broad and flexible program of graduate and post-doctoral study, especially designed to integrate the study of population with a variety of disciplines. The student thus may pursue studies in his basic academic discipline while at the same time gaining a broad understanding of the population field and developing special competence in the applications of his discipline to human population dynamics.

Anthropology

The curriculum of the Department of Anthropology centers on study and analysis of modern-day problems resulting from cultural change in all parts of the world. One Ph.D. degree requirement is a field work program which stresses the importance of long-term, intensive personal experience by the researcher and an in-depth appraisal of values and motivational systems within a societal grouping. Students will have the opportunity for direct involvement in research projects related to modernization and population change. Current faculty research includes a study of contraception as a cultural innovation.

Biostatistics

The Department of Biostatistics is the only such department in the United States having both a depth of interest in fertility studies and a broad background in the field of vital statistics. Degree programs in Biostatistics include the Master of Public Health and Master of Science in Public Health; the Ph.D. in Public Health; and the Ph.D. in Biostatistics with a minor in Demography or in Genetics.

The department provides basic courses in methods of population research and short courses in vital registration procedures,

statistical methodology, sampling and survey techniques, and related areas. It arranges field experience for students with particular emphasis on family planning program evaluation.

Faculty members in the department serve as consultants to agencies and organizations concerned with measurement of fertility, vital rates, and evaluation of family planning programs. The department also collaborates with the Research Triangle Institute in projects concerned with statistical aspects of population. Departmental research includes studies of perinatal and infant mortality and a follow-up study of size of family among recently married couples.

Economics

Graduate course work in the Department of Economics during the academic year 1967-68 will include studies in demography with emphasis on relationships between population change and economic development. Departmental research is particularly concerned with this subject and with economic effects of family planning programs.

Students at this University may also take advantage of an exchange arrangement with Duke University and receive full credit for graduate-level course work there. Duke's Population Studies Program, directed by Professor Joseph Spengler, is particularly strong in demographic economics.

Epidemiology

The academic curriculum in epidemiology is designed to equip students with epidemiological skills and principles needed in program development and assessment. Course work provides basic insights into the biological and social dynamics of population growth, in order to increase the effectiveness of epidemiologists in this area.

The department is particularly interested in developing techniques to evaluate the impact of family planning programs on the family itself, with special interest in the relationship between family size and the health of individual members of the family.

Other departmental interests include studies of social and psychological determinants of program acceptance and studies of the antecedents and consequences of abortion and use of various contraceptive methods.

Genetics

Students may be accepted either for the degree in Genetics or for the primary degree in another discipline with a minor in Genetics. Course work and research training are available in biochemical genetics, cell biology, metabolic defects, human genetics, population genetics, statistical genetics, and behavior genetics of mammals and man.

The State of North Carolina is particularly well suited for study of human genetics. The population is stable, families were large in earlier generations, family records are good, and it is relatively easy to assemble a kindred group of 500 or more persons. In addition, there are several tri-racial populations in the state whose genes are derived from Caucasian, Negro, and Indian ancestors. These populations have presented unusually favorable material for students in anthropological genetics.

Health Education

The basic curriculum of the Department of Health Education is oriented toward preparation of the educator-generalist. Courses dealing with family planning are available in both master's and doctoral programs. An additional requirement for the master's degree is a field work program, carefully tailored to the needs of each student and arranged with collaborating field training centers throughout the United States. For students concerned with population, experience is arranged in a family planning education situation.

Health Education faculty are especially concerned with the learning process and educational methods as they apply to fertility control, program planning, motivation and acceptance of new practices by population groups, development of training designs, and administration of training programs in family planning and family life education.

Journalism

The School of Journalism offers programs of study leading to master's and doctoral degrees. Research assistantships may be available for students interested in information retrieval, news dissemination, and content analysis—in the field of population and in other communications-related areas.

The School has undertaken an extensive project under a grant from the Rockefeller Foundation to develop a computerized information retrieval system for annotated bibliographic materials in the population field. Faculty research includes a study of the diffusion of news of a significant event in the population field, and a content analysis study of the role of the press in family planning.

Maternal and Child Health

The Department of Maternal and Child Health offers a flexible program of study in population dynamics and family planning as they relate to the health of mothers and children. A curriculum leading to the Master of Public Health degree with special emphasis in family planning is available for physicians and nurses majoring in this department. Designed to prepare its graduates for family planning program development and administration, course work includes the basic sciences of public health as well as maternal and child health and population studies. A six to eight week field training experience is tailored to the individual needs of each student.

The department is engaged in several research projects concerned with family planning. A recently completed study dealt with a method of determining the prevalence of pregnancy and early pregnancy loss rates in a population. Research currently underway includes a study of factors associated with utilization of family planning clinical services and the effects of such services in the community.

Political Science and Public Administration

The Department of Political Science offers courses dealing with political development and change in both industrialized and underdeveloped nations. Through study of such areas as Latin America, Africa, and Asia, students may examine demographic effects on political systems; and the Institute for Latin American Studies serves as an additional center for scholars

concerned with demographic problems in the Americas. Course work may include a graduate seminar on population and political change.

A second course of study, leading to the Master of Public Administration degree, is offered together with the Institute of Government. Financial assistance is available to students who propose to focus their study on the politics of population planning or administration.

Psychology

The Department of Psychology offers several courses which may be of value to students with interests in the population field—in such areas as social psychology, behavior theories, communication and motivation, attitude measurement, and behavioral genetics.

Current faculty research includes a study of psychological factors which may influence fertility behavior, and an effort to develop a psychological theory of population dynamics with implications for increasing the effectiveness of family planning programs.

Public Health Administration

The Department of Public Health Administration offers studies leading either to master's or doctoral degrees in Public Health with concentration on population. The course work is designed to prepare administrators to develop new programs in family planning, to organize evaluations of effectiveness, and to design research related to family planning administration.

Departmental faculty are concerned with assisting North Carolina State officials in the planning, training, and evaluation of improved family planning and health programs.

Faculty members are also engaged in a major project aimed at studying administrative problems peculiar to family planning programs and developing case materials for use in training administrators.

Religion

Any serious study of population problems in the world must ultimately deal with questions of the role of religion in the life of man and of basic human systems as these relate to procreation. The Department of Religion seeks to play its part in the population program by bringing the approaches of social scientists and of humanistic scholars in comparative religion and theology to focus on these questions.

A two week workshop planned for 1967 will bring together a group of scholars to illuminate our understandings of religious and ethical aspects of population dynamics and to consider implications for developing more adequate public policies in this field.

Reproductive Biology

Several departments in the University of North Carolina Medical School are involved in basic research in human reproduction. The Obstetrics and Gynecology Department is particularly concerned with studies of uterine physiology, while the Departments of Pediatrics and Biochemistry are engaged in research in reproductive endocrinology. More recently, immunological approaches to reproduction are being developed.

Clinical studies on family planning methods are facilitated by newly strengthened hospital services and by collaborative relationships with the service facilities of other agencies in the area. The School of Medicine is also a leader in developing research and teaching in sex education. A recent faculty appointee in the Department of Obstetrics and Gynecology is president of the American Association of Marriage Counsellors.

Sociology and Demography

The Department of Sociology offers a flexible curriculum designed to train students for careers in research, teaching, and administration in the field of social demography and population. The course work leading to a Ph.D. in Sociology includes an area of specialization in population focusing on composition and distribution; trends in fertility, mortality, and natural increase; and internal and international migration.

The program further stresses the use of vital statistics and survey and census data. A social statistics laboratory, coupled with an extensive population library and data bank within the department, permits ready access to demographic information. Departmental research includes studies of demography and social change in Southern United States, socio-economic aspects of fertility, family planning and demography in Thailand, demography of India, and more.

Zoology

Fundamental studies of population dynamics form a major part of the Zoology Department's training and research effort in ecology. Departmental concern is based on the premise that as the major user of energy on this planet, man's survival as a species population will depend on his increasing ability to control the complex physical and biological world about him. Current research includes studies of physiological, behavioral, and genetic mechanisms that regulate the size of natural animal populations; and the role of competition among species in regulating and structuring animal communities.

The graduate training in ecology is supported in large part by the U. S. Public Health Service, under a joint grant to the Departments of Zoology and Botany through the University's Institute for Environmental Health Studies.

STIPENDS

Fellowships for population study within the University are currently available in each of the participating departments. Fellowships include tuition, fees, and a stipend. A limited number of travel grants are also provided. Stipends vary according to previous degrees and training, number of dependents, and area of specialization, and generally follow the schedules of the National Science Foundation and National Institutes of Health. Yearly stipends presently available range from \$2,000 to \$10,000.

**FOR ADDITIONAL INFORMATION ON THE
ACADEMIC STUDIES PROGRAM, WRITE
TO THE CHAIRMEN OF INDIVIDUAL
DEPARTMENTS**

FACULTY INVOLVED IN POPULATION STUDIES

Anthropology

FRANK T. CLOAK, JR., Assistant Professor of Anthropology. Ph.D., 1966 (Wisconsin).
PETER R. GOETHALS, Associate Professor of Anthropology. Ph.D., 1961 (Yale).
JOHN GULICK, Professor and Chairman of the Department of Anthropology and Research Professor in the Institute for Research in Social Science. Ph.D., 1953 (Harvard).
JOHN J. HONIGMANN, Professor of Anthropology and Research Professor in the Institute for Research in Social Science. Ph.D., 1947 (Yale).
RALPH C. PATRICK, JR., Associate Professor of Epidemiology. Ph.D., 1954 (Harvard).

Biostatistics

JAMES R. ABERNATHY, Assistant Professor of Biostatistics. Ph.D., 1965 (North Carolina).
ELIZABETH J. COULTER, Associate Professor of Biostatistics and Economics. Ph.D., 1948 (Radcliffe).
JAY H. GLASSER, Instructor in Biostatistics, M.S., 1960 (Columbia).
BERNARD G. GREENBERG, Professor and Chairman of the Department of Biostatistics. Ph.D., 1949 (North Carolina State).
PETER A. LACHENBRUCH, Assistant Professor of Biostatistics. Ph.D., 1965 (California).
FORREST E. LINDER, Visiting Professor of Biostatistics. Ph.D., 1932 (State University of Iowa).
H. BRADLEY WELLS, Associate Professor of Biostatistics. Ph.D., 1959 (North Carolina).

Botany

EDWARD G. BARRY, Assistant Professor of Botany. Ph.D., 1961 (Stanford).
J. FRANK McCORMICK, Associate Professor of Botany. Ph.D., 1961 (Emory).

Economics

JAMES H. BLACKMAN, Professor of Economics. Ph.D., 1958 (Columbia).
JAMES C. INGRAM, Professor of Economics. Ph.D., 1952 (Cornell).
J. WILLIAM LEASURE, Associate Professor of Economics. Ph.D., 1962 (Princeton).
RALPH W. PFOUTS, Professor and Chairman of the Department of Economics. Ph.D., 1952 (North Carolina).

Epidemiology

JOHN C. CASSEL, Professor and Chairman of the Department of Epidemiology. M.B., B.Ch., 1945 (University of Witwatersrand, South Africa); M.P.H., 1953 (North Carolina).
BERTON H. KAPLAN, Assistant Professor of Epidemiology. Ph.D., 1962 (North Carolina).
ABDEL R. OMRAN, Associate Professor of Epidemiology. M.D., 1952 (Cairo University), Dr.P.H., 1959 (Columbia).

Genetics

- ROBERT C. ELSTON, Associate Professor of Biostatistics and Research Associate in Pathology. Ph.D., 1959 (Cornell).
JOHN B. GRAHAM, Alumni Distinguished Professor of Pathology. M.D., 1942 (Cornell).
JOHN C. LUCCHESI, Assistant Professor of Zoology. Ph.D., 1963 (California).
WILLIAM S. POLLITZER, Assistant Professor of Anatomy. Ph.D., 1957 (Columbia).
HERMAN A. TYROLER, Professor of Epidemiology. M.D., 1947 (New York University).

Journalism

- JOHN B. ADAMS, Professor of Journalism and Research Professor in the Institute for Research in Social Science. Ph.D., 1957 (Wisconsin).
WAYNE A. DANIELSON, Professor of Journalism, Research Professor in the Institute for Research in Social Science, and Dean of the School of Journalism. Ph.D., 1957 (Stanford).
JAMES J. MULLEN, Professor of Journalism and Research Professor in the Institute for Research in Social Science. Ph.D., 1954 (Minnesota).
DONALD L. SHAW, Assistant Professor of Journalism. Ph.D., 1966 (Wisconsin).

Maternal & Child Health

- SIDNEY S. CHIPMAN, Professor and Chairman of the Department of Maternal and Child Health and Clinical Professor of Pediatrics. M.D., 1928 (McGill); M.P.H., 1947 (Yale).
NAOMI M. MORRIS, Assistant Professor of Maternal and Child Health. M.D., 1955 (Colorado); M.P.H., 1959 (Harvard).
EARL SIEGEL, Associate Professor of Maternal and Child Health. M.D., 1948 (New York Medical College); M.P.H., 1961 (California).
E. BARBARA STOCKING, Associate Professor of Maternal and Child Health (Nursing). M.P.H., 1957 (Harvard).
J. RICHARD UDRY, Associate Professor of Maternal and Child Health and Associate Professor of Sociology. Ph.D., 1960 (Southern California).

Mental Health

- ROLF P. LYNTON, Visiting Assistant Professor of Mental Health. B.S., 1944 (London School of Economics); Training Fellow, 1953-1955 (Harvard).
ROBERT N. WILSON, Professor of Mental Health. Ph.D., 1952 (Cornell).

Obstetrics and Gynecology

- ROBERT G. BRAME, Assistant Professor of Obstetrics and Gynecology. M.D., 1955 (North Carolina).
WILLIAM E. EASTERLING, JR., Assistant Professor of Obstetrics and Gynecology. M.D., 1956 (North Carolina).
JAROSLAV F. HULKA, Associate Professor of Obstetrics and Gynecology and Maternal and Child Health. M.D., 1956 (Columbia).
HARRY S. MCGAUGHEY, Professor and Chairman of the Department of Obstetrics and Gynecology. M.D., 1956 (Wisconsin).
ETHEL M. NASH, Clinical Associate Professor of Obstetrics and Gynecology. M.S., 1949 (North Carolina).

Pediatrics

- FRANK S. FRENCH, Instructor of Pediatrics. M.D., 1956 (Rochester).
JUDSON J. VAN WYK, Professor of Pediatrics. M.D., 1948 (Johns Hopkins).

Political Science

- FREDERIC N. CLEAVELAND, Professor and Chairman of the Department of Political Science and Research Professor in the Institute for Research in Social Science. Ph.D., 1951 (Princeton).
ROBERT T. DALAND, Associate Professor of Political Science. Ph.D., 1952 (Wisconsin).

Psychology

- UDAI PAREEK, Visiting Associate Professor of Psychology. Ph.D., 1958 (University of Delhi).
JOHN W. THIBAUT, Alumni Distinguished Professor of Psychology and Research Professor in the Institute for Research in Social Science. Ph.D., 1949 (M.I.T.).
ROGER B. WELLS, Instructor of Psychology. M.A., 1966 (North Carolina).

Public Health Administration

- CHARLES B. ARNOLD, Assistant Professor of Public Health Administration. M.D., 1960 (McGill); M.P.H., 1965 (North Carolina).
WILLIAM S. FLASH, Assistant Dean of the School of Public Health, Associate Professor of Public Health Administration, and Lecturer in Political Science. Ph.D., 1954 (Harvard).
MOYE W. FREYMAN, Professor of Public Health Administration and Director of the Carolina Population Center. M.D., 1948 (Johns Hopkins); Dr.P.H., 1960 (Harvard).
O. DAVID GARVIN, Visiting Associate Professor of Public Health Administration. M.D., 1932 (South Carolina); M.P.H., 1939 (Johns Hopkins).
JOHN T. GENTRY, Assistant Dean for Program Development and Associate Professor of Public Health Administration. M.D., 1948 (Washington University); M.P.H., 1951 (Harvard).
SAGAR C. JAIN, Visiting Assistant Professor of Personnel and Public Health Administration. Ph.D., 1964 (Cornell).

Public Health Education

- RALPH H. BOATMAN, JR., Professor and Chairman of the Department of Public Health Education. Ph.D., 1954 (North Carolina).
BETTY P. MATHEWS, Visiting Professor of Public Health Education. Dr.P.H., 1960 (University of California).
ELIZABETH L. McMAHAN, Associate Professor of Public Health Education. M.S.P.H., 1944 (North Carolina).
K. V. RANGANATHAN, Visiting Associate Professor of Public Health Education. M.D., 1951 (Madras University); M.P.H., 1962 (California).

Radio, Television, and Motion Pictures

- ROBERT R. BLAKE, Lecturer in Radio, Television, and Motion Pictures. M.A., 1958 (California State College).
DEBORAH W. STIRLING, Lecturer in Radio, Television, and Motion Pictures. B.S.J., 1963 (Northwestern).

WESLEY H. WALLACE, Professor and Chairman of the Department of Radio, Television, and Motion Pictures. Ph.D., 1962 (Duke).

Religion

ARNOLD S. NASH, Professor of the History and Sociology of Religion. D.D., 1946 (Coe College).

Social Work

GERALDINE GOURLEY, Associate Professor of Maternal and Child Health. M.S., 1942 (Chicago).

MASON P. THOMAS, JR., Assistant Director, Institute of Government. LL.B., 1951 (North Carolina).

Sociology

CHARLES E. BOWERMAN, Professor and Chairman of the Department of Sociology and Research Professor in the Institute for Research in Social Science. Ph.D., 1948 (Chicago).

EDGAR W. BUTLER, Assistant Professor of Sociology and Research Associate in the Institute for Research in Social Science. Ph.D., 1965 (Southern California).

HORACE HAMILTON, Visiting Research Professor of Sociology and Biostatistics. Ph.D., 1932 (North Carolina).

AMOS H. HAWLEY, Professor of Sociology and Research Professor in the Institute for Research in Social Science. Ph.D., 1941 (Michigan).

GERHARD E. LENSKE, Professor of Sociology and Research Professor in the Institute for Research in Social Science. Ph.D., 1950 (Yale); LL.D., 1964 (Wittenberg).

N. KRISHNAN NAMBOODIRI, Assistant Professor of Sociology. Ph.D., 1962 (Michigan).

HALLOWELL POPE, Assistant Professor of Sociology and Research Associate in the Institute for Research in Social Science. Ph.D., 1963 (Michigan).

RICHARD L. SIMPSON, Professor of Sociology and Research Professor in the Institute for Research in Social Science. Ph.D., 1956 (North Carolina).

RUPERT B. VANCE, Kenan Professor of Sociology and Research Professor in the Institute for Research in Social Science. Ph.D., 1928 (North Carolina); LL.D., (Hendrix College).

Zoology

HOWARD T. ODUM, Professor of Zoology. Ph.D., 1951 (Yale).

ALAN E. STIVEN, Associate Professor of Zoology. Ph.D., 1962 (Cornell).

MAURICE WHITTINGHILL, Professor of Zoology. Ph.D., 1937 (Michigan).