

the body politic

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Moving Into the Future

The Chair Discusses the Curriculum in Public Health Nursing

Talk to Dr. Marla Salmon, chair of public health nursing, and she will tell you about the excitement and challenge of developing the new public health nursing curriculum. "In fact," Salmon says, "the faculty and staff have taken deliberate steps to position the curriculum for a major leadership role in the future of public health and public health nursing."

The UNC School of Public Health has always had an excellent reputation among the schools of public health in the nation. According to Salmon, the primary reason for this reputation has been the strong commitment to "doing the right thing well."

Traditionally, public health nursing has held a leadership role in the practice of public health. In fact, the very roots of public health practice can be traced to the efforts of Florence Nightengale, Lillian Wald and others who began delivering preventive services in the community. Florence Nightengale was probably the first public health practitioner who based her practice on "data." Her assessment of the risks associated with being a soldier in the insanitary conditions of hospitals in the Crimean War was the first documented, systematic assessment of its kind. This assessment was the basis for Nightengale's major campaign to mobilize the British Parliament to take legislative action on behalf of the soldiers at risk.

More recently, the Frontier Nursing Service of Kentucky and its counterparts in many rural counties of North Carolina are examples of public health nurses delivering crucial services to populations at risk.

What is the picture of public health nursing today?

"Public health nursing remains the single largest public health manpower category in official agencies," Salmon says. "In addition, public health nurses are

practicing in industry, schools, and private community agencies. The move toward the dehospitalization of patients coupled with the increasing elderly population has attracted even greater numbers of nurses to practice in community settings."

"Public health nurses are needed to play a key role in the delivery of health services in the community and to teach in academic programs to prepare nurses for these roles," she said. "The public health nursing perspective is also an important component of public health research."

The curriculum structure was developed intentionally to enhance the development of public health nursing. "One of the key factors in this decision," she continued, "was the recognition that public health nursing is a truly interdisciplinary practice. Indeed, the hallmark of public health nursing has been the ability to work with and through other disciplines in public health."

Continued on pg. 16



Salmon



From the Desk of the Dean

The arrival of the students in late August ushered in the Fall Semester in Chapel Hill. As you read this newsletter Fall break and midterm examinations are over. A new class of students always brings challenge and excitement to the School.

You may be interested in a composite picture of the 1987-88 class. In addition to North Carolina, twenty countries, 39 states and the District of Columbia are represented. The student body is predominately female (61%), and the median age is 28 years with a minimum of 21 and a maximum of 54. The School enrollment continues to be over 900. This number includes 106 undergraduate and 692 graduate students on campus and 124 in the regional degree and off campus programs. We look forward to an exciting interchange with these students.

In the June newsletter I reminded you that four departments were undergoing searches for chairs. It is with great pleasure that I can now announce that decisions have been made for all. Professor Mildred Kaufman has accepted a three-year term as the chair of the Department of Nutrition, and I have recommended Dr. Kerry E. Kilpatrick to chair the Department of Health Policy and Administration, Dr. Barry H. Margolin to chair the Department of Biostatistics, and Dr. Milton Kotelchuck to chair the Department of Maternal and Child Health. Drs. Kilpatrick and Margolin are expected to begin work in November 1987 and Dr. Kotelchuck in May 1988. (See page 16 for the article about Ms. Kaufman. Information about the other chairs will be published following their approval by the University channels.)

The construction of the new building continues to progress on schedule. As I write, the brick work is almost complete on the classroom and office wing, and has begun on the laboratory wing. The small parking lot to the South of Rosenau is under construction. (See page 24 for a picture of the progress to date.)

As alumni you will be interested in several committees which I have appointed to begin work this fall. Mr. Robert B. Moorhead, Associate Dean Computing and Information Services, is chairing a committee to plan the dedication of the new building and the celebration of the 50th birthday of the School of Public Health. These are two good reasons to celebrate for the entire 1989-90 academic year. We hope our alumni will participate in all of these events.

Continued on pg. 15



President's Message

The 1987-88 year is well underway and it is shaping up to be a productive one. I will use this column to share with you the goals and accomplishments of the Alumni Association. I believe that continuity is essential for the on-going growth of the Association so I will continue to work on the goals of the previous board, while incorporating some of the new ideas that have been recommended by the Long-Range Planning Committee.

I want to share with you the current progress on the following goals:

- Increase membership
- Complete the Endowment Fund
- Make the annual conference more self-sustaining
- Increase the student emergency loan fund
- Improve communication with alumni.

The goal of increasing membership is being addressed by the membership chairman, Betsy Suttle, who plans to hold regional Alumni Association activities throughout North Carolina. These regional get-togethers will give the alumni an opportunity to see how their participation can assist the School and the current students. The first social event is scheduled for November 20, 1987 in the Triangle area. Alumni in the state will receive specific notice of gatherings in their areas.

The Board is pleased to report that the fund-raising for the Greenberg Endowment is nearly complete. The continuing fund-raising efforts are being

Continued on pg. 15

In This Issue:

Future	1
From Desk of Dean	2
President's Message	2
Moveable Feast	3
Elderly Research	4
Debate on Ecology	5
Infant Mortality	7
Faculty Honored	8
BIOS Training Program	9
Banner Year	11
On Campus	17
Alumni News	19

A Moveable Feast

Exploiting Nature's Defenses Against Ground Water Pollution

by Suzanne Appelbaum

Until as recently as six or seven years ago, it was not known that microorganisms are present in aquifers (the ground water in the subsurface of the earth). These microbes have been shown to be capable of breaking down chemical pollutants in the water. However, the normal action of the microbes on the pollutants is very slow. Since the water itself typically moves at a rate of only one to two meters per year, the time available for microbial action on the pollutant is very long. Therefore, even this very slow rate of activity is significant, and since it involves the process of metabolism, has the potential to be manipulated to some extent.

In the laboratory of Dr. Frederic Pfaender of the UNC-CH Department of Environmental Sciences and Engineering, work is underway to try to understand the physiology of these subsurface microorganisms in order to influence the rate at which they act in the environment. "What we are dealing with here," says Pfaender, "is the phenomenon of adaptation - the adjustment of the microbial community to the chemical pollutant. Some adaptation will take place naturally, enabling the organisms already present in the ground water to grow and metabolize more of the chemical. The other kinds of adaptive changes that can occur naturally are either genetic or molecular, and usually occur very quickly, or require a very long time. However, there appear to be ways to manipulate the existing physiology to accomplish the same goals."

Commercially, there are some dozen or so companies in the business of providing ground water remediation. They have traditionally relied on one or more methods of adding organic nutrients or oxygen to speed up the metabolic process. "If it's done right, it works," explains Pfaender. "We are now experimenting by adding new things to the environment to make the pollutant break down faster. Our aim is to help companies that are doing this work understand what they are doing and how to do it better."

Modelling the Flow

Pfaender, in collaboration with Dr. Cass Miller, a ground water hydrologist in the Department of Environmental Sciences and Engineering, is seeking to devise a model of the transport and fate of pollutant in the ground water. Previous models have not included microbiology - in this case the attempt is to include the indigenous community of microorganisms. Assisting Pfaender and Miller with this project and laboratory studies of the action of microbes are Environmental Sciences and Engineering graduate students C. Margerie Aelion, Durell Dobbins, and Ou



Drs. Frederic K. Pfaender and Cass T. Miller perform a transfer step as part of the biodegradation measurement procedure.

Jiang, along with postdoctoral associate C. Michael Swindoll.

Pfaender's group, which has previously relied on samples of contaminated subsurface soil/water imported from sites in Oklahoma or Michigan, now has access to a contaminated ground water site in North Carolina and is launching a field-scale study of the site with funding from the Environmental Protection Agency. They will be able to define and sample the entire plume, or range of movement, of the pollutant.

Explaining the Effects of Pollutants on Uncontaminated Soil

In the laboratory, Pfaender's group will employ a technique they have developed in their earlier studies of unpolluted ground water, only in this instance they will take a clean soil and contaminate it to see how it will respond. (Pfaender explains that getting uncontaminated samples out of the subsurface is very difficult, requiring an expensive drilling rig and a special attachment to bring up the core samples. The team will have access to a rig belonging to the state of North Carolina, and will use the attachment which they have designed themselves.) The experimental procedure involves first taking each sample and making a slurry with water. Dividing the sample into several subsamples, they add radiolabeled chemicals (would-be pollutants) in various concentrations. They then let the bottles incubate for varying lengths of time, at which point they measure the amount of radiolabel metabolized in each bottle. Two measurements are taken, one of the carbon dioxide produced and one of the pollutant that is taken up into the cells of the microbes. The relative amount of radioactive

Continued on pg. 4

Researchers Assist Programs for Elderly

Pew Grant Awarded to School's Program on Aging

Researchers at the School of Public Health have been awarded a \$370,000 grant to provide technical help to agencies that provide community and home health care to the frail elderly.

The national effort, called the Living at Home Program (LHP), was established to give frail elderly people – some of whom otherwise would have to move to nursing homes or hospitals – access to services that help them to remain at home. Services typically include help with personal care, cleaning, meals, shopping, financial affairs and arranging transportation.

The study will investigate ways to help the agencies participating in the LHP serve more high risk persons at a lower cost.

The three-year grant was awarded to the School of Public Health's Program on Aging by the Pew Memorial Trust of the Pew Charitable Trusts in Philadelphia. Dr. William G. Weissert, program director and professor of health policy and administration, is principal investigator.

"To show maximum efficiency," Weissert said, "home care projects need to confirm that they are serving high risk persons. Also, they must be able to estimate how many services their clients will use each year, what they will cost, how that compares to other home care projects, and what the same care would have cost in a nursing home."

"Home care projects for the elderly have been under fire as too expensive," Weissert said. "This project is intended to help them deliver care at lower cost. Ultimately we hope that the U.S. Congress and state legislatures will be willing to expand coverage to more frail elderly."

Two North Carolina sites, the Coordinating Council for Senior Citizens in Durham and Presbyterian Hospital in Charlotte, are among those scheduled to receive help from the project. Other sites are in Boston, MA; Buffalo and New York, NY; Chicago, IL; Cincinnati, OH; Denver, CO; Miami, FL; Milwaukee, WI; Nashville, TN; Oklahoma City, OK; Pasadena and San Francisco, CA; Pittsburgh, PA; St. Paul, MN; and Tucson, AZ.

As part of the technical assistance they provide, Weissert said the UNC team will be working on ways for agencies involved in the Living at Home Program to:

- Estimate need, supply and demand for home and community health care, such as adult day care, at the city and county level.
- Predict admissions to nursing homes and hospitals, and total annual expenditures for these ser-

vices among the elderly who receive community care.

- Compare participant characteristics with patterns of home and community care use.
- Improve the efficiency of community and home health care programs so they operate closer to a point where the benefits they provide outweigh what they cost to operate.

Weissert, a nationally-known expert in long-term care of the elderly, is currently conducting a nationwide study of the financial viability of adult day care. Joining Weissert on the Pew Trust project are Drs. Thomas H. Rice, William N. Zelman, and James W. Luckey of the Department of Health Policy and Administration and Drs. Gary G. Koch and William D. Kalsbeek of the Department of Biostatistics. The staff coordinator is Jennifer Elston.

The Pew Charitable Trusts represent seven philanthropic funds established between 1948-82 by the surviving sons and daughters of Joseph N. Pew, founder of the Sun Oil Co. The UNC grant came from the Pew Memorial Trust, the first and largest of the seven trusts, created by the Pews in 1948. The Pew Memorial Trust is one of more than 30 foundations and trusts supporting the Living at Home Program. The Pew Trusts support nonprofit organizations in the areas of conservation, culture, education, health sciences, human services, public policy and religion.

Feast

From pg. 3

carbon converted to these two products indicates the amount of metabolism or breakdown of chemical or pollutant. A recent refinement of this technique employs a chemical called polyvinylpyrrolidone, which does a good job of releasing the cells from the soil of the sample. The cells are then transferred to the liquid in the bottle, filtered, and the radioisotopes counted.

Data analysis is based on kinetics – how long it takes to metabolize the chemicals relative to their concentration. "We are trying to put time scales on how long these things take," explains Pfaender. If a pollutant is neutralized by natural processes before it reaches a location where it will become a problem, then no intervention will be necessary. For the other cases, Pfaender is hoping to devise ways to speed up the process by which indigenous microbes metabolize the pollutant.

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Public Debate on Ecology

Issues Sharpened, Thanks to UNC Institute

by Wallace Kaufman

All the cars going by on Pittsboro Street between the Credit Union and the little brown shingled cottage are going in the same direction these days, but inside the cottage there's nothing one way about the Institute for Environmental Studies. Director Richard "Pete" Andrews says the Institute "is a switchboard that links the University to the people of North Carolina." If the incoming calls are any indication, this switchboard is wired for trouble.

Suppose you are a citizen in Carteret County and the U.S. Marine Corps announces that its jet fighters will be burning a path across the sky only a hundred feet above your favorite beach as they practice protecting vital U.S. interests around the world. You can write an angry letter to the paper and your Congressman. You can talk about the ungodly noise and the fright. But how do you prove the noise is going to hurt anyone?

Much to the surprise of the fishermen and landowners in the citizen group call Carteret Crossroads, a staff member at the Institute of Environmental Studies found the expertise they needed in three specialists at the Medical Research Lab at Wright Patterson Air Force Base in Ohio. They were specialists in the effects of noise on humans.

John Runkle, attorney for Carteret Crossroads said, "We would never have been able to comment intelligently (on the Marines' announcement) without someone who could put us in touch with all this information." Runkle doesn't know whether the group has had any impact yet, but he notes that soon after they contacted the Marines with their information, an announcement came from Washington that the jets would fly no lower than 500 feet. And the Navy itself, which had first discounted the noise problem, was soon in touch with the experts at Wright Patterson.

Taking on the Marines was a routine case. In the last six months alone the Institute has responded to calls about the following:

- effects of nuclear power on nearby residents;
- the consequences of dense development in a city watershed;
- the reputation off a chemical company hoping to relocate to North Carolina;
- the possibility of a new county landfill contaminating the Haw River;
- the link between water and pesticide use for a golf course and public health;
- the effect of soil erosion on trout streams;

- how to measure the health risks for a community that had been sprayed with herbicides from an airplane.

The Institute is not exactly the 911 number for environmental emergencies. What everyone gets, and most are grateful for, is understanding and information.

The four full-time Institute staffers and their one secretary usually put callers in touch with volunteer specialists. The specialists' response might be a simple telephone consultation, the delivery of relevant publications, testimony at public hearing, or help in setting up a long range health monitoring program.

Helping citizens understand environmental issues and participate in public decisions has recently been formalized as the Institute's Environmental Resources Project. ERP is the program most citizens are likely to know about, but it could not exist without the Institute's larger mission.

In the largest sense the Institute is a law school without lawyers, devoted to understanding a single law that no legislature ever passed. The Institute is the University's response to a law that poses a fundamental challenge to America's most sacred traditions.

The "first law of ecology" says, "Everything is connected to everything else." It is a declaration of interdependence in a nation whose first great political statement was a Declaration of Independence. 1970 saw its first formal celebration, a national Earth Day attended mainly by bearded "eco freaks." Despite critics of American education, Americans have been as intellectually mobile as physically mobile. All the polls agree, we must find some accommodation between individual freedom and protecting our common environment.

In a world where everything is connected to everything else, a vital part of the Institute's mission is connecting the University's many specialists to each other and to experts outside the University. To stay at the cutting edge of their disciplines, many academics work within narrow intellectual confines. Eventually the import of their work may seep out. This kind of trickle-out scholarship doesn't do much to solve problems like world hunger or how to dispose of a city's mounting garbage. It doesn't tell the University how it can use the fly ash that will be generated by its new steam plant.

To keep the University community abreast of the best thinking in the field, the Institute sponsors a continuing lecture series, often working with other departments. The list of speakers over the past five

years demonstrates the kind of connections Andrews believes are important. They include chemists, economists, geographers, systems analysts, psychologists, meteorologists, urban planners, historians, and writers. They have been heads of federal agencies and national conservation groups, Nobel Prize winners, and U.S. senators.

Between its speakers and the seminars and conferences it sponsors, the Institute generates a lot of talk. Andrews, however, does not measure the Institute's success by the number of conferences his staff attends or by pages published (although the count is impressive). Ask him what the Institute has done and he talks about changes in the state's approach to hazardous waste. He talks about new systems in industry for tracking dangerous chemicals. He talks about a new county system for recycling and saving landfill space. When he talks about a conference, he prefers to talk about the leaders of government and business who attended.

The Institute has begun to build a statewide and even national reputation for its practical workshops. In 1984 it ran a workshop on environmental auditing for leaders of environmental, business and government groups. Environmental auditing is not the processing of tracing dollars, but chemicals. The payoff for work place and public safety is clear, but good auditing not only can save an industry from stiff fines and big lawsuits, it can lead the way to economic disposal methods or recycling.

The end of all important talk is always a decision about what to do and how to do it. The Institute both helps people make decisions and studies how they make them. One of its new projects is a cooperative study with faculty and students in the business school of how federal policy analysts collect, analyze and present scientific and technological information.

To help North Carolina's high school students understand the complex but hugely important decisions to be made about the use of genetic engineering, the Institute has been working with a curriculum specialist at the N.C. Biotechnology Center. The Center's media specialist, Dave Smith, will create a decision simulation game using a California case in which federal, state and local agencies decided to release a newly created bacteria which protects vegetables against frost, the "Ice Minus Project."

While Pete Andrews believes the Institute must be relevant to the world's problems, he is not about to start a Mao-style cultural revolution and send academics to toil in factory and farm. He does believe, however, that scholars can learn from community involvement. Besides, he notes, the University's constituents are not only the readers of learned journals or even students, but all the citizens of N.C.

While the dozens of faculty members associated with the Institute carry on their own research, under

Andrews' direction over the past five years the Institute has put community service at the center of its own activity.

Andrews wants a large part of that service to be off-campus education for both state leaders and citizens. Many citizens and local officials around the state, like those calling in about landfills, aerial spraying, and low level jet fighter runs, are already getting an education from the Institute's Environmental Resource Project headed by health educator Melva Okun.

Although ERP serves only local government and citizens groups, it epitomizes the goals of the Institute because it brings science to those who are farthest removed from it.

Many decision makers, their patience worn thin in hearings packed by panicked furious, frightened, misinformed, and confused citizens, wish those citizens would leave everything up to the politicians and the specialists. To do that would be to abandon democracy. The Environmental Resource Project has improved the quality of these deliberations and often assured everyone that the ultimate decisions were fair.

While the targets of citizen activists are often surprised by the scientific reinforcement they bring to public debate, the citizens themselves are sometimes surprised. ERP doesn't recruit scientists to tell citizens what they want to hear. A Durham group opposing Durham's Treyburn Development and its plan to locate a chemical plant in an important watershed sought information on the plant owner's environmental record. ERP did the research and reported that the company had a good record in the Northeast.

ERP has brought students from several universities into its work through SCIP, the Student Community Involvement Program. Students interested in getting academic credit for hands on experience with environmental issues contact ERP for an assignment. Working with SCIP and a faculty supervisor, the students undertake research that fulfills requirements for papers, theses, practicums and independent studies. SCIP is presently supervising students from Duke, UNC and NC Central University.

To help both the students and the community groups calling in, ERP has been hustling to expand its Scientists Register. The Register is a list of professional scientists who are willing to volunteer their time and talent to help local government and citizens trying to analyze environmental issues. ERP recently began looking for more funds to create a Retired Scientists Program to complement the Register.

Despite the impressive record compiled by the Institute and its projects, Director Pete Andrews is looking ahead to a greatly expanded University-citizen switchboard. In the report on his first five

Continued on pg. 10

European Strategies Reduce Infant Mortality

The first detailed analysis of health care services provided to pregnant women in 10 European countries is shedding new light on why the United States has slipped from about sixth place to 17th place in infant mortality during the past 30 years.

Nations with fewer resources than the United States are doing a better job of assuring infant survival, concludes C. Arden Miller, director of the study and professor of maternal and child health, UNC School of Public Health.

The recently published report, *Maternal Health and Infant Survival*, analyzes medical and social services to pregnant women, newborns and their families in ten European countries.

Miller reviewed pregnancy-related services in Belgium, Denmark, France, Federal Republic of Germany, Ireland, Netherlands, Norway, Spain, Switzerland and the United Kingdom.

"We avoided those countries that have totally controlled government monopolies on care because they don't have much relevance to the U.S. experience," he said. "The health care systems in the countries we looked at vary enormously and represent the kind of voluntary programs I think we want to preserve in this country."

He found that adequate birth weights and infant survival are being achieved by:

- establishing easily understood and readily available provider systems;
- removing all barriers, **especially economic ones**, to a full range of services, including prenatal care, delivery, home visiting, and health care for infants and children; and
- linking prenatal care to comprehensive social and financial benefits, including maternity leave and family allowances, that enable pregnant women and new mothers to protect their own well-being and to nurture their families.

"No pregnant woman in Europe needs to ask how or where she will receive prenatal care or who will pay for it," Miller reports. In contrast, 25 percent of women of prime childbearing age in the United States are not protected by either public or private health insurance; little more than half of practicing obstetricians will see Medicaid patients; and more than 20 percent of all pregnant women and a greater proportion of minority pregnant women fail to receive early prenatal care.

The experiences of the ten countries studied may be particularly relevant to the United States at this time, the report suggests. The populations of European countries have become increasingly ethnically

diverse since World War II, and the size of many European countries is similar to that of U.S. states, which have the discretion for developing health care programs and initiatives that are locally appropriate.

Insurance is an area where there is a major difference between the U.S. and countries in western Europe. Millions of people have no coverage in the U.S., while everyone is covered by some combination of public and private insurance in Europe.

"It didn't surprise me that we have terrible gaps in protection and in service in this country because I had known that," Miller said. "What did surprise me was the great diversity of ways that we can go about correcting that situation."

Miller reports that while financing systems for health care are strikingly different among the countries studied, all countries provide a full range of perinatal services, defined by the central government, to women of all socioeconomic levels without charge. Furthermore, while the maternal health and infant survival outcomes of the ten countries are all more favorable than those of the U.S., no country in the study spends as high a proportion of their gross national product on health care as the United States does.

"The European experience, and many special projects in our own country, have demonstrated that the wisdom and the means are available for the United States to improve vastly its performance for the care of pregnant women and newborns," Miller concludes. "Assuring appropriate perinatal care for every pregnant woman is an issue that is neither medical nor financial: it is political."

Miller recommends:

- a national system that provides insurance coverage for the expenses of childbearing for all pregnant women;
- multidisciplinary clinics working under the authority of state and local public health structures, subsidized and monitored according to national standards;
- home visiting through organized community programs; and
- paid pregnancy leave and other protections for health and safety of childbearing workers.

"The health of poverty and minority children has worsened in our country since 1981," said Dr. Sally Provence, president of the National Center for Clinical Infant Programs. "The consequences of poor perinatal care are not only tragic in human terms; they are ultimately costly, many times the price of providing good care in a timely manner."

Continued on pg. 8

Two MCH Faculty Honored

Dr. Dorothy C. Browne

For the third year in a row, the American Public Health Association has selected a faculty member at the School of Public Health to receive the Young Professional Award in the Maternal and Child Health Section.

Dr. Dorothy C. Browne, assistant professor in the Department of Maternal and Child Health accepted the award at the APHA annual meeting in New Orleans in October.

Drs. Jonathan B. Kotch, associate professor, and Mary Peoples-Sheps, assistant professor of maternal and child health, were recipients of the award in 1985 and 1986 respectively.

A former social worker, Browne is a specialist on child abuse and neglect who is especially interested in how stress relates to illness and contributes to the mistreatment of children.

Dr. C. Arden Miller, former chairman of the Department of Maternal and Child Health stated, "Dr. Browne is a black woman working in a field dominated by white men. She can be a fierce advocate – and a fair one – with the highest standards of excellence. Other people are doing significant work in child abuse and neglect, but few other investigators or consultants merge scholarship with a practical working perspective on the black family."

Dr. Marian Wright Edelman, president of the Children's Defense Fund in Washington, said, "Her publications reflect a broad knowledge of a variety of topics such as infant mortality, child abuse and neglect and the reproductive health of women in the workplace. As a talented minority health professional and teacher, Dr. Browne serves as a role model for minority students considering entry into public health and child health advocacy."

Browne, who joined the UNC faculty in 1981, is a graduate of Bennett College in Greensboro, NC, University of Pittsburgh, and Harvard University.

Dr. Elizabeth L. Watkins

The first annual award for distinguished service from the Health and Mental Health Commission of the National Association of Social Workers was presented to Dr. Elizabeth L. Watkins at the annual meeting of the Association in New Orleans, LA. She received the award based on her outstanding leadership and consultation with training programs for social workers in public health.

Watkins has given leadership to multidisciplinary training programs for social workers in public health at the University of Michigan and for the past 10 years at the University of North Carolina. Prior to coming to UNC she led the development of the health



Browne



Watkins

concentration at the School of Applied Social Sciences, Case Western Reserve University, Overland, OH. At the University of North Carolina she has collaborated with the School of Social Work in the development of a dual MSW/MPH degree program.

From 1962-1969 Watkins was a social work training specialist with the agency now known as Division of Maternal and Child Health Services, Department of Health, and gave consultation to schools of public health and social work throughout the country on the development of training programs in maternal and child health. She has continued to serve in this capacity in her academic role.

Watkins has conducted many national and regional continuing education programs for public health social workers. The most recent has been a series of three annual conferences for public health social workers in 13 states in southeastern and southwestern United States on "Infant Mortality and Morbidity: Bio-Psychosocial Factors."

Watkins research focuses on the health needs of migrant farmworker mothers and children. Her recent publications have discussed the conceptual base for public health social work and the health and social needs for women farmworkers receiving maternity care at a migrant health center.

Joining the faculty at UNC in 1978 as an associate professor, Watkins received degrees from Bryn Mawr College, Western Reserve University, and Harvard School of Public Health.

Infant Mortality

From pg. 7

The Ford Foundation provided support for the report, published by the National Center for Clinical Infant Programs, a Washington, DC based nonprofit organization concerned with the healthy development of young children and their families.

Copies of *Maternal Health and Infant Survival* are available for \$6 each from the National Center for Clinical Infant Programs, 733 15th Street, NW, Suite 912, Washington, DC 20005.

Training Program Prepares Leaders

Graduates Involved in Research on Environmental Health Problems

Check the graduates of the School's Environmental Biostatistics Training Program and you will find them in positions of leadership around the nation. They are teaching and conducting research at universities or in industry, designing and analyzing studies on the carcinogenic and teratogenic potential of chemicals, assisting health effects researchers, examining biostatistical issues of drug efficacy and regulation, or participating in projects on assessing risks.

All were a part of the training program funded by a grant from the National Institute of Environmental Health Sciences (NIEHS). Begun in 1972, the program received the fourth five-year grant in July 1987.

The program supports ten predoctoral students and two postdoctoral students per year at an annual budget of \$200,000. Dr. Larry Kupper, program director, says, "We are very proud of these graduates and the fact that many hold top-level positions at the Environmental Protection Agency, National Institute of Environmental Health Sciences, National Cancer Institute, universities and private industry."

"Over the past fifteen years we have produced 20 to 25 Ph.D. and Dr.P.H. graduates and a large number of M.S. graduates," he continued. "Several of the postdoctoral graduates are or have been members of the faculty in biostatistics. This is probably the most successful training program of its kind in the country."

Directed to predoctoral and postdoctoral education, the program trains biostatisticians to conduct biostatistical research relevant to important environmental health problems and to provide high-level statistical consulting support to other research workers in the environmental health field. In addition to the courses in mathematical and experimental statistics which are the core of a doctoral degree program for a professional statistician in the health sciences area, the students are required to study the nature and problems of the physical environment and its biological effects. The research conducted by the students has included the design and analysis of toxicological experiments concerning teratogenesis, mutagenesis and carcinogenesis, the design and analysis of environmental and occupational epidemiology studies, and risk assessment.

The following selected sample of the doctoral graduates illustrates the contributions they are making to the understanding of environmental health problems.

- John Bailer (Ph.D. 1986) is a research biostatistician, Biometry and Risk Assessment Program, NIEHS, Research Triangle Park, NC. Dr. Bailer designs and analyzes laboratory studies on animals to assess the carcinogenic potential of chemicals in the environment.
- Gary Brooks (Ph.D. 1984) is assistant professor of mathematical sciences, Clemson University, Clemson, SC. For two years prior to becoming assistant professor, he was a staff fellow representing NIEHS at the Radiation Effects Research Foundation, Hiroshima, Japan.
- John Creason (Ph.D. 1978) is chief, Biostatistics Branch, Environmental Epidemiology and Biometry Division, Health Effects Research Laboratory, U. S. EPA, Research Triangle Park, NC. He is responsible for planning, coordinating, assigning, and evaluating almost 250 health effects researchers.
- David Hoberman (Ph.D. 1986) is employed as a research biostatistician with the Food and Drug Administration (FDA), Rockville, MD. He deals with biostatistical issues regarding drug efficacy and regulation.
- Ken Portier (Ph.D. 1979) is associate professor of Environmental Biostatistics, Department of Statistics, University of Florida, Gainesville, FL.
- Susan Reade (Ph.D. 1986) is a research biostatistician for Bristol-Myers Company, Wallingford CT and the 1987 recipient of the Bernard G. Greenberg Award for Excellence in Doctoral Research.
- Robert Spirtas (Dr.P.H. 1975) is a biostatistician, epidemiologist for the Environmental Epidemiology Branch, National Cancer Institute, Bethesda, MD. He is concerned with the design and analysis of occupational epidemiology studies.
- David Svendsgaard (Ph.D. 1978) is a mathematical statistician working in the areas of risk assessment and quality assurance, Environmental Epidemiology and Biometry Division, Health Effects Research Laboratory, U.S. EPA, Research Triangle Park, NC.

A sample of postdoctoral trainee graduates follows.

- Lloyd Chambless is a research associate professor and Muhammad Habib is a research assistant professor, UNC Department of Biostatistics.
- John Karon, is a statistician with the clinical chemistry division, Center for Environmental Health, Centers for Disease Control (CDC), Atlanta, GA.
- Hoi Leung is senior biostatistician, FDA, Rockville MD.
- Ibrahim Salama is a professor, North Carolina Central University.

Continued on pg. 16

years as director he wrote, "I believe the University has not yet come close to fully developing the potential benefits that could be achieved by effective coordination and integration of these talents. . . I believe it is both appropriate and valuable. . . to start by 'thinking big' about the University's potential and what an institute like this could be doing to achieve it, rather than merely about whether the Institute's current activities represent reasonable directions for university effort and acceptable levels of productivity."

Mr. Kaufman is a freelance writer residing in Chatham County, NC. This article was condensed from an article published in the *The University Report*, Vol. 34, No. 3-May 1987.

Alumnus Heads Naval School

Kenneth A. Rethmeier has been appointed Commanding Officer, Naval School of Health Sciences, Bethesda, MD. The Change of Command Ceremony was held June 25, 1987.

Rethmeier, a Captain in the U. S. Navy, Medical Service Corps, received the B.S.P.H. degree from UCLA in 1967 and the M.S.P.H. and Dr.P.H. degrees from the UNC School of Public Health in 1968 and 1982 respectively. His most recent assignments have included those of chairman, Geographic Naval Medical Commands Working Group and assistant chief of staff, Resource Management, Naval Medical Command located in Washington, DC and London, England. He is a member of the faculty, Department of Health Services Administration, Central Michigan University, Washington, DC.

A recipient of many military awards, Rethmeier was presented the Navy Meritorious Service Medal and the Navy Meritorious Unit Commendation in 1986. The citation for the Service Medal commended Rethmeier for "superior performance and unparalleled leadership" in the development of a financial program of coordinated reporting systems, the transfer of six Medical Clinics in the United Kingdom to one under the jurisdiction of the Naval Medical Command, the initiation of a region-wide internal control program, and the development of a five-year health care plan to assure that the appropriate health care providers and support services were available to meet to needs of all beneficiaries in the European Region.

The Department of Health Policy and Administration has chosen Rethmeier to be the 1987 Executive-in-Residence. This program brings outstanding administrators to the University to share their experience with faculty and students. He visited the UNC campus in October to meet with faculty and students and participate in a series of special seminars.



Rethmeier

ENVR Takes Top Awards

The top awards of the 1987 American Water Works Association were presented to ENVR Department Chairman Russell F. Christman and students Karen Werdehoff and Daniel Norwood during the annual conference and exposition in Kansas City, MO.

Christman won the AWWA Research Award for his many years of research on humic materials in terrestrial fresh water, for elucidating the reaction between humic materials and water treatment oxidants, which provided a basis for new drinking water standards, and for his continuing contribution to national and international water supply research.

Werdehoff and Norwood, 1986 UNC degree recipients, were awarded 1987 Academic Achievement Awards - Werdehoff for the best thesis and Norwood for the best dissertation. Dr. Philip C. Singer directed Werdehoff's thesis, "Effects of Chlorine Dioxide on THM and TOX Formation Potentials and on the Formation of Inorganic By-Products." Norwood's dissertation, "Aqueous Halogenation of Aquatic Humic Material: A Structural Study," was directed by Dr. Christman. The research reports will be reviewed for possible publication in the *Journal*, AWWA. Each student received a check for \$1000.

In addition alumnus, Mirat D. Gurol, now assistant professor at Drexel University, won the research division award for her paper, "Factors Controlling the Removal of Organic Pollutants in Ozone Reactors," and 16 other program participants had either current or past connections with the School of Public Health. They were: Fred Marrocco, Jim Edzwald, Des Lawler, Brian Dempsey, Fran DiGiano, Don Johnson, Phil Singer, Mark Clark, Lorriane Wilson, John Tobiason, Bill Dowbiggin, Alan Scrivner, Jerry Speitel, Paul Hebert, C. R. O'Melia, and Paul Prendiville.

1986-87 Gifts – Another Banner Year

Contributions from alumni and friends to the School of Public Health continued at a record level during the 1986-87 fund raising year. Our sincere thanks to all for their generosity.

The campaign to complete the B. G. Greenberg Alumni Endowment continued with the contributions of almost \$48,000 to be placed in the fund. You will recall that the first Greenberg Alumni Endowment Award was made in 1986 to Dr. Norman Weatherly, professor of parasitology and laboratory practice. The second award was presented to Dr. Earl Siegel, professor of maternal and child health, during the 1987 Alumni Awards Luncheon.

Your contributions are a valuable asset to the School. They provide resources for programs and projects of great value to the School for which there are no other funds. Established by the alumni, the endowment encourages the retention of the excellent faculty. Scholarships for students is an ever increasing need, and one the alumni and the School's Alumni Association will want to address in the near future.

As we enter a new fund raising year, we encourage you to consider increasing your gift to the School. Your contributions may be sent through the Carolina Fund, designated to public health or to the B. G. Greenberg Alumni Endowment. Your gifts may also be mailed directly to the School of Public Health Alumni Association. If you or your spouse are employed by a company which matches gifts to educational institutions, your contribution may be doubled or tripled. You may charge you contribution to your Visa or MasterCard.

We thank you for the many ways which you assist the School – providing field sites for students and being their mentors, participating in courses, recruiting prospective students, acting as advocates for public health and the School, joining and taking an active part in the School's Alumni Association, and giving generously to the School for special projects which mean so much.

Categories of giving have been established as follows:

Dean's Club	\$500 or more
Patrons	\$100 to \$499
Fellows	\$25 to \$99
Friends	\$1 to \$24

The names of alumni and friends who contributed to the School of Public Health in excess of dues to the School of Public Health Alumni Association and the category of giving follow.

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Matching Gifts:

Carolina Power and Light made the largest single gift to the B. G. Greenberg Alumni Endowment.

Businesses and industries which matched gifts of alumni are:

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Linda W. Little, past president of the SPHAA, continued as chair of the Fund Raising Committee during the 1986-87. Members of the committee are:

Delton Atkinson	W. Kenneth Poole
Becky S. Bowden	Margaret Rossett
Priscilla Guild	Craig D. Turnbull
Joan C. Huntley	Harriet H. Barr
Donald Lisnerski	

Dean's Desk

From pg. 2

Another committee of interest to the alumni is the Committee on Development, composed of faculty and alumni. I have asked the committee to make recommendations about the organization of the fund raising efforts in the School. Dr. James Allen, HPAA, will chair the committee and Ms. Harriet Barr will be the liaison with the Dean's Office. The SPH Alumni Association has worked very hard to raise money for projects which benefit the School for which I am very appreciative.

In addition, the Academic Programs Committee will study the undergraduate public health degree programs. The international program will also be reviewed this year. As the committees complete their work I will report their recommendations to you.

In closing let me say again how very important our alumni are to the School. We need your active involvement in the School's Alumni Association and seek your ideas and suggestions about matters of mutual interest.

Michel A. Ibrahim, M.D.
Dean

President's Message

From pg. 2

directed this year by chairman, Rudolph Jackson, who will be working closely with the Carolina Fund.

"Public Health in the Forefront" is the theme of the annual public health conference, scheduled for April 7-8, 1988. Mark your calendars now to attend. The Conference Planning Committee, under the leadership of Sally Malek, is progressing well. In an effort to make the conference more self-supporting, the Board has agreed to increase conference fees slightly this year.

The goal of providing more student support has been partly realized by an increase in the Boards contribution to the Student Emergency Loan Fund. This is a revolving fund from which students may borrow to meet unexpected needs. The Board also plans to explore the possibilities of a student scholarship fund.

Another of the on-going goals is communication between the Board and the alumni. This column in *The Body Politic* is one method of sharing our plans and accomplishments with you. I would like to hear from you, the alumni. I welcome your suggestions and ideas. Do not hesitate to communicate with me through Ms. Harriet H. Barr, Assistant Dean for Alumni Affairs.

Myrna Aavedal,
President

Moore Receives Honorary Degree

Annie Ray Moore, 1947 graduate of the School's Department of Health Education, has received an honorary degree from Lenoir-Rhyne College, Hickory, NC. The degree was conferred during the 96th spring commencement exercises in May.

During her career Mrs. Moore was teacher and school health coordinator in North Carolina. She later served as a World Health Organization (WHO) consultant in family planning and health education helping to develop school health programs in various countries. Following her retirement from WHO, Moore returned to North Carolina to work with the NC Department of Human Resources, Division of Aging. A speaker, consultant and researcher in aging, she is a member of the Lutheran Services for the Aging.

Also active in work involving housing for the aging, Moore most recently helped with the relocation of Montagnard refugees from Vietnam.

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Nutrition Chair Appointed



Mildred Kaufman has been appointed chair of the Department of Nutrition, School of Public Health effective July 1, 1987. The appointment is for a period of three years.

In announcing the appointment, Dean Michel Ibrahim said, "We are particularly fortunate to have Professor Kaufman accept this assignment. She will bring a wealth of experience and wisdom to this role. Both in her career prior to coming to the University and since her arrival here, she has repeatedly proven to be an effective administrator, a scholar, and a valuable colleague."

Kaufman is an expert in public health and maternal and child nutrition programs. She has held many elected offices in the American Dietetic Association. In the American Public Health Association, she has been chair of the Food and Nutrition Section Council and member of the Governing Council. She is currently a member of the Helen Stacey/Joseph Walsh Award Committee. In addition, she is a past president of the Association of State and Territorial Public Health Nutrition Directors and the Association of Faculties of Graduate Programs in Public Health Nutrition. In 1978 she was a member of a study mission to Vietnam sponsored by the U.S. Senate Judiciary Committee.

She also has conducted several national surveys on state and local public health nutrition services in official health agencies.

Before coming to Chapel Hill in 1977, Kaufman supervised the public health nutrition program and directed the WIC Nutrition Unit, Florida Department of Health and Rehabilitative Services. Previously she was a nutrition consultant for the Division of Chronic Diseases, U.S. Public Health Service, Department of Health, Education and Welfare.

The Philadelphia native is a graduate of Simmons College in Boston with a B.S. degree in food and nutrition. She received the M. S. degree in nutrition in public health from Teacher's College, Columbia University. Kaufman was a dietetic intern at Indiana University Medical Center.

BIOS Program

From pg. 9

- Woodrow Setzer is a research biostatistician, Teratology Division, U.S. EPA, Research Triangle Park, NC. He has a research grant to develop risk assessment methods using teratology (i.e., birth defect) data on animals.

Moving Into Future

From pg. 1

In this structure, in addition to all of the administrative powers and authorities of a department, the curriculum has additional capabilities, including extending and receiving joint appointments to and from other units in the School of Public Health. Translated into action, the structure has already facilitated joint research ventures, access to doctoral student advising, and the involvement of key senior faculty from other units of the School in the development of the academic program.

According to Salmon, a key concept in the Curriculum is that effective preventive strategies begin with knowing "risk" and end with evaluation of the impact of the strategy on reduction of the risk. The teaching program aims to prepare public health nurses to plan their services on a research based assessment of need, target preventive programs, be effective in developing and managing information systems, and capable of evaluating the services they provide.

"This concept is a clear mandate to conduct, teach, and share research and research findings," she said.

Deputy Chair for Research Development, Dr. Maija Selby, joined the faculty in 1986 to assist in the research development for the Curriculum. Since then a number of exciting projects have begun. Among these are a study to assess the practice needs of nurses with graduate preparation in public health which will help to fine-tune the unique teaching and research programs and a project being developed jointly with practicing public health nurses.

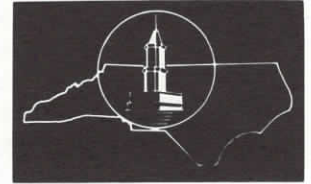
Two degree programs, M.S. and M.P.H., are offered in the on-campus program. The off-campus programs offer the M.P.H. The educational programs include a number of learning alternatives for students. In addition, an increasing number of continuing education courses are available to address the needs of nurses in practice. "Planning for the future will reflect the research being conducted in the field and the input of key people in practice throughout the country," Salmon said.

"Public health nursing will continue to be an essential component in public health," Salmon concludes. "The Curriculum in Public Health Nursing is committed to making significant contributions to meeting the health needs of people in North Carolina, the region, and the nation through strong educational programs, incisive research, and responsive service."

The Body Politic is edited by Harriet H. Barr. News items should be sent to the Dean's Office, CB#7400, Rosenau Hall, Chapel Hill, NC 27599. This newsletter was typeset using the TeX typesetting system and printed from copy supplied by the editor. TeX is a trademark of the Am. Math. Soc.

On Campus

Faculty and Student News



Vic Schoenbach, EPID, presented a paper on the Self-help Quit Smoking Program for Black Americans study at the meeting of the American College of Epidemiology in October in New Orleans.

C. Arden Miller, MCH, has stepped down as chair of the Department and will be on sabbatical leave for six months. He will return to the University as professor on March 1, 1988.

Elizabeth Watkins, MCH, has received a new grant from the U.S. Division of Maternal and Child Health Services to field test the effectiveness of the use of lay health advisors in providing health care to maternity patients and their infants in the first year of life. The tests will be conducted at four clinic sites in NC. Two alumnae are involved in the project - **Kim Larson**, PHNU, in project coordinator and **Suzanna Young**, NUTR, is nutritionist. Watkins is currently serving as acting chair of the MCH Department.

Francis A. DiGiano, ENVR, is chair of the Water Pollution Control Federation's new Groundwater Committee. The committee is charged with developing papers and recommendations on state-of-the-art treatment technology and policy issues. DiGiano spent three weeks in Taiwan this spring under the auspices of the Water Resources Planning Commission, Bureau of Economic Affairs.

Patricia Z. Barry, HPAA, spent two months in Israel during the summer working on the book she is writing about teaching in human services.

Deborah Freund, HPAA, has returned from an extended trip to Asia where she was consultant to Shanghai Medical College on the development of a new health administration program. She also conducted site visits to Siriraj Hospital and Chulalongkorn Hospitals in Bangkok, Thailand, for The Rockefeller Foundation. The Foundation

funds an economics training component to the International Clinical Epidemiology Network in HPAA. Freund has been awarded a three-year Kellogg National Leadership Fellowship.

Sagar Jain, HPAA, spent the past year overseas primarily in Saudi Arabia where he completed a survey of hospitals in that country. His international project on culture and management is now underway in 31 countries through a network of 46 collaborators.

Bonnie Rogers, PHNU and School of Nursing, has been elected to a two-year term on the board of directors of the American Association of Occupational Health Nurses. Rogers directs the occupational health nursing program in the School of Public Health. Rogers was guest editor of the June issue of *Seminars in Occupational Medicine*.

Robert McLean, HPAA, recently served as a consultant to Burlington, VT on the issue of charitable status of not-for-profit hospitals.

William Zelman, HPAA, returned this fall after a year at the Moses Cone Memorial Hospital, Greensboro, NC. His major projects included product line management problems and the design, implementation, and measurement of centers of excellence.

Tom Rice, HPAA, was awarded a University Research Council Grant to study the impact of alternative insurance options on the use of medical services funded by UNC. Rice and his wife, Kate, have a new baby girl, Clara, born in August.

Ronald W. Helms, BIOS, has been elected to the Board of Directors of the American Statistical Assn. During his three-year term, Helms' responsibilities will include representing the interests of the 3,000-member Biopharmaceutical Section in the establishment of organizational policy.

EPA has appointed **J. Donald Johnson**, ENVR, to serve as a consultant member of its Science Advisory Board.

Laurel Files, HPAA, has been appointed by the Chancellor to chair a committee to review and recommend necessary changes in the UNC-CH policy on sexual harassment.

Gary Rozier, HPAA, is involved in conducting a oral health survey funded by the NC Department of Human Resources and the Kate B. Reynolds Health Care Trust.

Faculty who direct the HPAA educational programs are:

Doctoral - **Deborah Freund**;

Master's - **Laurel Files**;

Undergraduate - **Dan Beauchamp**;

Non-Residential - **Kit Simpson**.

Frederic Pfaender, ENVR, chaired the 1987 Gordon Research Conference in Applied and Environmental Microbiology held in New London, NH.

Parker Reist, ENVR, has been named chair of the NC Refrigeration Examiners Board.

NC Gov. James Martin has appointed **James E. Watson Jr.** to a three-year term on the NC Radiation Protection Commission. He has also been named to a two-year term on the Triangle J (NC) Council of Governments' Nuclear Energy Public Information Committee, one of the first of its kind in the nation. The committee has received the endorsement of the Nuclear Regulatory Commission and the Governor's Office. Watson, **Douglas Crawford-Brown** and **Steven Simon**, ENVR, and several of their students participated in the annual meeting of the Health Physics Society in Salt Lake City, UT, in July.

Carol W. Runyon, HEED & UNC Health Promotion & Disease Prev. Ctr. and **Patricia Waller**, HPAA & Highway Safety Research Ctr., participated in the AMA conference on unintentional injuries in adolescents. Runyon discussed the epidemiology of adolescent injuries and Waller the public policy issues in prevention of vehicular crashes.

Arnold Kaluzny, HPAA, is a member of the Organizational Indicators Task Force, Joint Commission on the Accreditation of Hospitals. The task force has the responsibility to develop organizational indicators that link to clinical outcomes. The indicators will be included as part of the revised accreditation procedure for the JCAH. Kaluzny has been appointed to a five-year term on the Cancer Control Committee, National Cancer Institute. This summer he was chair of the Ad Hoc NCI Review Committee on Improving Cancer Patient Management through the Tumor Conference. The Joint Commission on Accreditation of Hospitals recently interviewed Kaluzny on the role of organizational indicators in accreditation of hospitals for their cable TV program, *Perspectives*.

Dan Okun, ENVR Emeritus, received the honorary title of advisory professor when he returned to China in May to lecture at a National Water Environmental Workshop at Tongji University. He also met with officials of the Beijing Municipal Environmental Research Institute to discuss a new water resources project for the Beijing-Tianjin area.

Berton H. Kaplan, EPID, has been elected a Fellow by the Academy of Behavioral Medicine Research. The award made on June 14, 1987 is given in recognition of outstanding achievements in the field of behavioral medicine research.

In May, **Shrikant I. Bangdiwala**, BIOS, attended the 38th International Science and Engineering Fair held in Puerto Rico where he chaired the judging team of the American Statistical Association. He attended the 46th session of the International Statistical Institute and presented a statistical methodological paper, *Using the Agreement Chart to Examine for Observer Bias* and conducted a workshop on prevention of childhood and adolescent and injuries at the meeting of the Latin American Pediatric Association Congress, Caracas, Venezuela.

Richard N. L. Andrews, ENVR and Inst. for Envr. Studies, was elected to the nominating committee, Section X: Societal Impacts of Science and Engineering, American Association for the

Advancement of Science and is a candidate for chairman-elect of the section. He is a member of the National Academy of Sciences, Board on Environmental Sciences and Toxicology and a member of the NC Natural Heritage Advisory Committee and Pollution Prevention Research Committee and the Air Toxics Committee, NC Academy of Sciences.

Barnett R. Parker, HPAA, was guest editor for two special issues of *Socio-Economic Planning Sciences: An International Journal* entitled "Field Applications of Operations Research in Primary Care within Developing Countries." He will become editor-in-chief as of January 1, 1988. The Pergamon Press journal is concerned with applications of management science and statistics to socio-economic problems in health and development. Parker coordinated the 1987 Southern Regional Conference of the National Council of International Health held in Chapel Hill in October cosponsored by NCIH, School of Public Health, Family Health International, CPC, INTRAH, RTI, Ronco Consulting Corp., and Burroughs Wellcome.

The UNC Board of Trustees recently approved the site for the UNC Alumni Center in a wooded area east of Kenan Stadium between Stadium Drive and the Ramshead Parking Lot. The UNC General Alumni Association is conducting a fund raising drive to fund the Center which will house the offices of the General Alumni Association, meeting rooms, overnight accommodations, and dining facilities.

James Edwin Hall, PALP, was a visiting scientist for two months this summer at the Walter Reed Army Institute of Research in the Division of Experimental Therapeutics.

Patricia F. Waller, HPAA & associate director for driver studies, Highway Safety Research Center, made a presentation on heavy truck safety to the Transportation Committee, National Governors' Association.

Deborah Bender, MHCH, recently returned from Quito and Porto Viejo, Ecuador, where she served as a member of an interdisciplinary evaluation team for a mid-term evaluation of

a child survival project developed by Save the Children in Westport, CT. The project targets child immunizations, oral rehydration therapy and growth monitoring for children under five years of age. Project personnel are working with the communities to sustain the program after the three-year funding. One of the targeted communities has banded together to build a gravity-fed water tank; another has built several "guarderías"; a third has organized a group of youth to play instruments, including drums and zampoñas typical of Latin music.

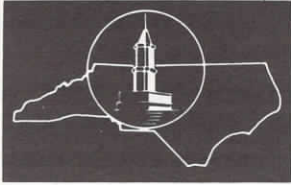
Barbara Chavious, HPAA, has been elected vice president, NCPHA at the annual meeting in Fayetteville in Sept. Chavious is coordinator of the non-residential degree program and a clinical instructor.

Craig Turnbull, BIOS, is a member of several committees including Faculty-Alumni Development and Administrative Board, SPH; UNC-CH Bicentennial Case Statement Committee on The University and Undergraduate Education, and APHA's Mortimer Spiegelman Award Committee. Turnbull is the recipient of a two-year University Research Council grant: "Statistical Analysis of Perinatal Death and Low Birth Weight." He organized and presided at the invited papers session, APHA, on categorical data methods for longitudinal studies.

EPID faculty **Suzanne Landis**, **Vic Schoenbach**, **Barbara Hulka**, and **David Weber** have received funding for a study of strategies for sexual contact tracing for HIV in three health departments in North Carolina. The Study is a part of a NIAID-funded Clinical Studies Group, School of Medicine Division of Infectious Diseases. **Gary Koch**, BIOS, is the biostatistician for the Clinical Studies Group.

Bill Cochrane has been elected president of the General Alumni Association. Bill was on the faculty of the UNC Institute of Government during the 1940s and 1950s and taught courses in public health law at the School of Public Health. He is senior advisor to the US Senate Rules Committee.

Cont. on pg. 22



From Near and Far

Alumni News

1945 - The family home of **Mazie Jones Levenson**, HEED, has been placed on the Register of Historic Places. The home is located in Boone, NC. Mazie has completed her term of office on the Guilford County (NC) Watershed Committee.

1947 - **Alan Cameron**, HEED, and his wife, Cathy, write that they have been busy building a new house in Victoria, Canada ... **Pat Yarbrough**, PHNU and HPAA (1967), has opened a consulting firm, Pat Yarbrough & Associates (PY&A) in Atlanta, GA.

1950 - **Robert C. Milligan**, HEED, retired as health officer, Passaic, NJ, on June 1 after 11 years of service. Bob's career includes positions as advisor to the Ministry of Health, Thailand, and to the West Indies for PAHO; official of the PA Dept. of Health; and associate director of APHA.

1952 - **Clarence E. Pearson**, HEED, has been named a Distinguished Fellow of the Society for Public Health Education, Inc. The award was presented at the annual meeting of the society in New Orleans in Oct. 1987.

1957 - **Kerwin and Vera Stallings**, PHNU, moved to Maryville, TN, in May.

1958 - **William H. Tadros**, BIOS, is now living in Burke, VA.

1961 - **Daniel Whiteside**, HPAA, director, Bureau of Resource Development, U.S. Department of Health and Human Services, has been named chief dental officer of the U. S. Public Health Service. ... **Eric Ram**, ENVR & HEED MPH 1968 and PhD 1971, visited Chapel Hill in Sept. Eric is director, Christian Medical Commission, World Council of Churches, Geneva, Switzerland ... **Joey M. Carter**, PALP, was elected chief of staff of Desert Humana Hospital, Phoenix, AZ.

1962 - **Ivette Marin de Perez**, NUTR, is administrator, Food Service Department, Centro Servicios Integrales, a rehabilitation center for

mentally retarded adults and is dietary consultant, Instituto Oftalmico, Puerto Rico.

1963 - **Ron Shearin**, ENVR, was recently elected president-elect of the NC Chapter of the Health Physics Society. Ron is with Carolina Power and Light ... **Richard W. Boubel**, ENVR, has moved from VA to Sunriver, OR.

1964 - **William R. Fox**, HPAA, is now living in Jeffersonville, IN ... **William A. Darity**, HEED, a member of the UNC Board of Trustees, has been appointed to serve on the Search Committee for the UNC Chancellor. Chancellor Christopher C. Fordham submitted his resignation to the UNC Board of Trustees at their August meeting effective June 30, 1988.

1965 - **Dick Phillips**, ENVR, is director of clinical research, Ames Division of Miles Laboratories in Elkhart, IN. Dick is responsible for all medical field trials of new diagnostic products in the U.S. and partially responsible for trials in Japan, Italy, Germany, Spain, France and U.K. He has also been elected to the board of directors, Society of Forensic Toxicologists.

1966 - **Bob Hale**, HPAA, is living in Brownsville, TN, where he is the southwest regional medical director, TN Department of Health and Environment.

1967 - **George W. Prothro**, HPAA, was named the 1987 Doctor of the Year by the Tulsa County (OK) Medical Society Auxiliary. George was recognized for his "lifetime contribution to his patients, profession and community." Although officially retired as of July 1, 1986, he retains his title as director, Division of Community Medicine, Univ. of Oklahoma Tulsa Medical College and spends about four hours a week arranging public health experiences for medical students and residents. George is a volunteer teacher at Oklahoma College of Osteopathic Medicine and Surgery and Oral Roberts University College of Medicine and is heavily involved as a volunteer in programs for the elderly and activities of the Am. Lung Assn.

1969 - **W. Boone Mora**, PALP (DrPH 1978), resides in Troutdale, OR.

1970 - After two years in Indonesia, **Marilyn Tonon**, HEED (DrPH 1979), is living in Windsor Locks, CT.

1971 - **Virginia Newbern**, MENH, has moved from MS to Greenboro, NC ... **Jeanne Betsock Stillman**, HPAA, is a training specialist with RONCO Consulting Corp., Washington, DC, assisting the national family planning program of Tunisia to add more family planning and population



Dr. James Y.C. Yen is congratulated by (lf. to rt.) Dr. Eunice N. Tyler and Dr. Lucy S. Morgan, SPH professors emeritus, and Dr. Elizabeth McMahan, former SPH faculty. Dr. Yen received the Oxford Cup, highest honor of Beta Theta Pi, in August 1987 in Asheville, NC.

content to the curricula in all Tunisian medical, midwifery, nursing and social work schools. ... **Diana Lee Evans** and **Thomas C. Ricketts**, HPAA, were recently married and are living in Chapel Hill where Tom is director, Program in Health Policy Analysis, Health Services Research Center ... **Melba Mensch**, NUTR, is director of dietetic services at Mater Hospital, Waratah, New South Wales, Australia.

1972 - A letter from **Sandra Noll**, MHCH, brings news that she and her husband, **Emmett**, HPAA 1973, have adopted two children, Erik and Adrian. In 1984 the family moved from NYC to Alabama where Emmett is the Bureau of Health Care Delivery and Assistance representative and NHSC state advisor to AL. They live in Autauga County just outside Montgomery. Sandra is the author of a training manual for professionals and a curriculum for adolescents and adults handicapped by learning disabilities and mental retardation. The manual is entitled, *Education for Adulthood* ... **Maria Helena Frazao**, NUTR, is the assessor to Forum de Ciencia e Cultura, Universidade Federal do Rio de Janeiro - Instituto de Nutricao. In January, she will return to UNC to teach at the Institute of Nutrition ... Following the completion of the PhD degree **Deborah A. McFarland**, HPAA, has been appointed assistant professor in the Master of Public Health program at Emory Univ., Atlanta, GA.

1973 - **Barbara A. Hughes**, HPAA, has been elected to a three-year term as one of two NC delegates to the ADA; to a four-year term as director and member of the Development Committee, AAUW Foundation; and a two-year term as president-elect of Altrusa International, Inc. Barbara is director, Nutrition and Dietary Services Branch, NC Division of Health Services ... **John Herbold**, ENVR, recently moved to Montgomery, AL ... **Mary J. Beil**, PHNU, retired from the U.S. Air Force on June 1, 1987 and is now living in Waldorf, MD.

1974 - **Carolyn Rice**, PHNU, and her husband, Budd, moved to Lihue, Hawaii, in Sept. Carolyn started a

home care and hospice agency five years ago in a rural, mountainous area of Colorado which had no such services. She writes that this was a great adventure. Her community health nursing textbook was published in 1984 ... **Kathy Parker**, HEED, visited the University of Ibadan, Nigeria, recently to work with **Bill Brieger** and **Joshua Adeniyi**, HEED, who are members of the faculty. Bill writes that he was an external examiner at the University of Dar es Salaam in Tanzania. Also, he is developing a manual/guidelines for Health Education in Schistosomiasis Control under a WHO contract and was a member of a WHO Scientific Meeting on Integration and Management of Vector Control in Primary Health Care. Bill visited UNC recently to work with **Eugenia Eng** on a research project. Joshua has completed a 15-month assignment as UNICEF consultant to the Primary Health Care (PHC) Division, Nigerian Federal Ministry of Health, to develop model PHC programs in the states. In addition, he was recently a member of a WHO Scientific Meeting on Food Safety. ... **Fitzroy G. Joseph**, MHCH, retired July 31, from his position as WHO regional adviser in MCH/FP/Population, African Region, Brazzaville, Congo. Fitzroy has returned to Trinidad, West Indies and plans to continue consultancies with the UN and other agencies.

1975 - **Gary D. Coslett**, PALP DrPH 1981, is manager of quality assurance and scientific affairs, Europe, Abbott Diagnostic Products GmbH. His office is located in Wiesbaden, Germany ... **Michael V. Robertson**, HPAA, and his wife, Darcy Edwards, are the proud parents of a daughter, Jessica Leigh. They live in Mary Esther, FL, where Michael is the administrator of an inpatient alcohol and drug abuse treatment center in Pensacola ... **Fredrick S. Whaley**, BIOS, PhD 1983, has accepted a position as assistant professor, Department of Community and Family Medicine, Dartmouth Medical School, Hanover, NH.

1976 - After receiving the MB degree in the health track from Seton Hall, **William Pew Brandon**, HPAA, is a

Robert Wood Johnson Fellow at Johns Hopkins University.

1977 - **Mun Hui Chia**, BIOS, is working in the public health institute, Institut Kesihatan Umum, Kuala Lumpur, Malaysia ... **Joice M. Maney** and **Michael L. Boner**, HPAA, were recently married and are living in Greensboro, NC.

1978 - **Timothy McAdams**, ENVR, has joined the Chemical Institute of Toxicology, Research Triangle Park, NC ... **Marion Elliott Deerhake**, ENVR, has been appointed to the Wake County (NC) Hazardous Materials Community Awareness and Emergency Response Committee for a two-year term. The committee will promote community awareness and business safety in the handling of hazardous materials in Wake County and its municipalities and serve as the local emergency planning committee under the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) to develop an Emergency Response Plan for the county as required under Superfund. Marion is on the staff of the Research Triangle Institute ... **W. Ward Patrick**, HPAA, is medical director of a 120-bed nursing home in Pinehurst, NC, and a medical consultant for the Moore County Health Department ... **Patillo Donald**, NUTR, is assistant professor, Department of Surgery, and co-director, Nutrition Support Service, University of Virginia Hospital at Charlottesville ... **Nina Tiglio Ruckes**, NUTR, is coordinator of the dietetic technician program, South Central Community College, New Haven, CT ... **Paul Seaton**, former student HPAA off-campus, has accepted the position as deputy director, Institute for International Programs, Johns Hopkins University School of Hygiene and Public Health. Paul, a long time staff employee of the School, recently resigned as social research associate and administrator, Office of International Public Health Programs, Dean's Office.

1979 - **David M. Bolda**, ENVR, has been named industrial hygienist for ELB/Monitor Inc., a Chapel Hill company ... **John Tobiason**, ENVR, has completed his doctoral studies at

Johns Hopkins and joined the Dept. of Civil Engineering, Univ. of Massachusetts as an assistant professor ... **Jo L. Williams**, HPAA, has moved to Southern Pines, NC, where she continues her work as regional nursing consultant for TB control, NC Division of Health Services ... **Burroughs Wellcome Co.** has appointed **Beth S. Everly** of Raleigh to assistant product manager in business group 1 ... **Allyson J. Bartlett** and **Barry A. Miller**, EPID, were recently married and are living in Silver Spring, MD.

1980 - Mary Lee Newman, and **Lynn Ellen Sinclair** (1984), NUTR, are members of the American Heart Assn., NC Affiliate, Food Festival Task Force for 1987 ... **Marci McFarland**, HPAA MSPH 1982, began work in May as director of planning and marketing, Miles Development Foundation, a managed care corporation in Damariscotta, ME ... **Rudolph Jackson**, HPAA, contributed a chapter on the Lincoln Community Health Center, Durham, NC, to a new textbook, *Institutional Systems Management: Concepts and Cases* edited by Drs. **Kathryn Magruder Habib**, EPID 1975 & PhD, and **Jon Jaeger**, Duke University, and **Arnold Kaluzny**, HPAA. The book grew out of a 1985 workshop which examined health-care clinics that are a part of a larger hospital or health-care organization. **Rudy** also is director of the NCCU component of a NCI grant which focuses on strategies to prevent or reduce smoking among Blacks. NCCU is collaborating with The University of Massachusetts at Amherst, which is the prime contractor. **William A. Darity**, HEED PhD 1964, is the principal investigator.

1981 - John Scandura, ENVR, is with the Toxic Substances Control Division, CA Dept. of Health Services. He and his staff identify and initiate remedial cleanup action at abandoned hazardous waste sites in southern California ... **Martha Groblewski**, HPAA, is director, Catawba Water AHEC in Lancaster, SC. She and husband, **Gary Creemers**, live in Charlotte, NC ... **Fay Ades Sachs**, NUTR, is WIC coordinator, Baltimore County Dept. of Health.

1982 - C. Barry Burns, ENVR, has been reappointed to the NC Radiation Protection Commission, which is responsible for adopting radiation protection regulations for the state ... **Anne Marie Mulkern**, HPAA, received the MD degree from George Washington Univ. in 1986 and completed her internship in psychiatry at NC Memorial Hospital and Dorothea Dix Hospital in 1987. A Captain in the U.S. Air Force, she is stationed at Langley Air Force Base where she is a general medical officer with emphasis in emergency medicine ... **Lynn Iler**, HEED & MPH 1986, and her husband, **Jeff**, are living in Waipahu, Hawaii where Lynn is with the Hawaii State Dept. of Health. As the only health educator for the rural family planning clinics she is involved in planning, implementing, and evaluating sexuality education programs in schools, community groups, and providing consultation and training to a variety of human service personnel. She and **Jeff** find the islands an incredibly beautiful place to live ... **Jay Whelan**, NUTR, has completed his PhD degree at Penn State.

1983 - Pamela Sprang, PHNU, was nurse coordinator of the Migrant Health Clinics, Spartanburg County, SC, Health Department. This fall Pam is teaching community health nursing in the BSN program, Mary Black School of Nursing, Univ. of South Carolina at Spartanburg ... **Jeffrey S. Levin**, HEED, has accepted a position at the University of Michigan, Ann Arbor. **Jeff** was formerly at the Univ. of Texas Medical Branch in Galveston ... **David S. Abrams**, ENVR, and **Henrietta Eisenstein** were married in Sept. in Rochester, NY ... **Mike Boyd**, ENVR, has been elected treasurer of the NC Chapter, Health Physics Society. **Mike** is with Carolina Power and Light Co. ... **Carolyn R. Cantlay**, HPAA, is living in Washington, DC ... **Marilyn Frye Pine**, NUTR, and her husband, **Chris**, have a baby girl born in 1986. They have moved from England back to Australia where **Chris** is working with development agencies and **Marilyn** is working part-time in community health ... **Lis-**

abeth Smith Melnik, NUTR, began work as WIC nutritionist in Schenectady, NY, in April 1987. Her husband, **Tom**, NUTR, a doctoral graduate, is enjoying his work also.

1984 - Anita Kirk, HEED, is education assistant South-Eastern Organ Procurement Foundation, Richmond, VA ... **Emery G. Plourde**, PALP (DrPH 1986), recently moved from Atlanta, GA, to Caribou, ME ... **Sandra T. Rothwell**, BIOS, and her husband, **Charles**, have moved to Bethesda, MD where they are employed with the National Institute for Health Statistics ... **Amy Preminger Artman**, HPAA, and her husband, **Ira**, are living in Metuchen, NJ where she is working as a planning analyst for the HMO Group ... **Amy Cohen Cohn**, HPAA, is health education coordinator for a "large, growing health promotion center" in Madison, WI and is serving on a committee for the Madison Public School system developing the health education curriculum for all grade levels ... **Barbara Edwards**, HPAA, received a WHO fellowship to study the consequences of the use of BCG vaccination in Europe ... **Bruce J. Fried**, HPAA, received the HCA (Academy of Management) Outstanding Paper Award for his paper entitled "Determinants of Power in a Health Care Setting: An Application of Strategic Contingencies Theory" ... **Rob Gage**, HPAA, is working in the Environmental Health Services Section of the New York City Department of Health ... **Nancy Hall**, HPAA, is assistant administrator in ambulatory care, Illinois Masonic Medical Center ... **Mary Melton** (formerly **Buchler**), HPAA, is health facility surveyor for Medicaid, NC Division of Facility Services, ... **Karen Tager Rivo**, HPAA, is staffing coordinator, Department of Nursing, Providence Hospital, Washington, DC ... **Shawn Zellmer**, HPAA, is working with the Roanoke Amaranth Community Health Group, Inc., Jackson, NC ... **Judy Ann Spivey** and **Marcus S. Fields**, PALP, were recently married and are living in Greenville, NC.

1985 - Rebecca Tooty Gabele, ENVR, has moved to Chapel Hill, NC

... **Linda Attarian**, HEED, resigned her position as program consultant, NC Affiliate, American Heart Association to move to Eugene, OR, where she will be teaching health education at the university during the next year ... **C. Edwin Webb**, HPAA, is now clinical affairs associate, American Pharmaceutical Association, Washington, DC ... **Shimon Scharf**, HPAA, has been appointed director, Burzilai Medical Center, Israel, and public health officer of the region. He and his wife, Rachel, have a son, Edan, born in September 1986 ... **Roxanne Roderick Moore**, NUTR, and her husband, Ted, have a son, Theodore Carlton Moore III, born, March 1987.

1986 - Sharon C. Long, ENVR, has joined an environmental consulting firm, Environmental Resources Management Inc., in West Chester, PA ... **Joseph Greco**, ENVR, has been elected secretary of the NJ Chapter of the Health Physics Society ... A report, *Hazardous Material Spills in North Carolina*, has been published by the NC Governor's Waste Management Board. The report, written by **Susan M. Heaney**, ENVR, focuses on the extent of the spill problem, the types of materials spilled, the causal factors associated with spills, and the State's response program. Susan is with EPA's Solid Waste Program in Washington, DC ... **S. Paige Hall**, HPAA, has been living in North Wilkesboro, NC for a year working as program director for SAFE, Inc., a domestic violence, rape crisis and child abuse program. As one of two staff members she has a variety of responsibilities including arguing with law enforcement over their interpretation of the domestic violence law and educating the health care community on working with battered and raped women ... **John T. Blair**, HPAA, has been promoted to director of social services in Gaston County, NC ... **Joe W. Glezen**, HPAA, is chair, Advisory Board, NC Health Occupations Education - Health Occupations Students of America ... **Mark Swanson**, HPAA, is acting director, Univ. of Texas Health Science Center in Dallas. He and his wife have a daughter, Laura, born in Oct. 1986

... Four students in HPAA were chosen to serve as Presidential Management Interns in Washington, DC. They are **Darrel Cox**, **Heidi Gelzer**, **Jan Kaplan**, and **Bert Zellmer** ... **Anne C. Doherty**, NUTR, and **Gregory C. Hinn** were recently married and are living in Winston-Salem, NC ... **Barbara Larson Reno**, NUTR, is a community health specialist in a diabetes control program, Bureau of Chronic Disease Control, Utah Department of Health.

1987 - Jonathan E. Morris, MHCH, in now living in Old Orchard Beach, ME ... **Tonie Goldstein**, HEED, writes that she has taken a position with The Green Door, a rehabilitative center for mentally ill, Washington, DC ... **Cherri R. Ritchie** and **Nicholas T. Farrell**, HPAA, were recently married and are living in Southgate, MI ... **Mike Duffy**, HEED, has accepted a position in the Health & Safety Department, SEIU (Service Employee International Union), the fifth largest union in the AFL-CIO. Mike will be working on publications about asbestos and hazards of working in sewage waste treatment and developing lobbying and policy strategies regarding occupational safety and health hazards for Union membership.

Alumni Deaths

It is with sincere sympathy that we announce the deaths of the following alumni.

Elizabeth Anderson, ENVR, in 1985 in Morehead City, NC

Harry Gidley, MSSE 1949, ENVR, in 1985 in Charleston, WV. Prior to retirement he served as a sanitary engineer with the West Virginia Department of Public Health.

Frances Ellen Setzer, MPH 1957, HEED, May 17, 1987 in Newton, NC after a long illness. She was former executive secretary, NC State Parent-Teacher Association and a member of the NC House of Representatives for the 1974 and 1976 terms.

Our thoughts are with the families of the above alumni.

On Campus

From pg. 18

Frances Lynn, ENVR, served as a reviewer for the National Science Foundation and the National Endowment for the Humanities and has been nominated secretary and member of the Executive Council, Society for Risk Analysis. She also addressed a staff seminar at CDC, Agency for Toxic Substances and Disease Registry.

Richard M. Kamens, ENVR, has received a one-year \$30,000 renewable grant from Ford Motor Company to help support air pollution studies of automobile exhaust systems. The research will investigate whether the toxic compounds are destroyed by exposure to sunlight or remain stable, or if other compounds form that are more harmful to health than the original ones. Most of the work will be conducted in specially designed outdoor atmosphere chambers. The award may be used for equipment or personnel assistance.

Dan E. Beauchamp, HPAA, is chair, Section on Alcohol and Drugs, APHA. The anticipated publication date of his book, *Equality and the Health of the Republic* is 1988.

Dana Quade, BIOS, is acting chair of the Department of Biostatistics.

Alvis G. Turner, ENVR, has been selected president-elect of the UNC Chapter of Sigma Xi, the Scientific Research Society of North America and has been named to the EPA Review Panel for Scientific and Engineering Personnel.

Student News:

Mona Ramesh Seth, HEED, was one of four undergraduate students at UNC who were awarded Class of 1938 Summer Study Abroad Fellowships. A junior, Mona worked in Nepal this summer.

Susan Chappell, NUTR, and **Mary Eileen Faltynski**, HPAA, graduated with honors in May from the BSPH degree program at the SPH.

Three students in ENVR have received student awards. **William Dowbiggin** was named recipient of the George Bunker Award, presented annually to the master's degree candidate with the

most outstanding scholarship and professional promise. Supported by a Board of Governor's Fellowship and a PHS Traineeship, Dowbiggin studied the use of ozone and its impact on the colloidal stability of particles in drinking water treatment. He has joined the engineering firm of Camp, Dresser & McKee in Raleigh.

Marcia Hawthorne and **William Eley** were co-recipients of the Environmental Sciences Achievement Award, which annually honors students who show the greatest potential in environmental sciences. Hawthorne, a MSPH May graduate was research assistant to the NC Governor's Waste Management Board. She was involved in analysis and evaluation of the use of compensation and incentives in siting hazardous low level and radioactive waste management facilities. As a Coast Guard officer, Eley attended UNC on a two-year scholarship from the Coast Guard. His MSPH technical paper reported on research that evaluated methods for monitoring heat strain for workers in encapsulated, impermeable protective clothing. He is a May graduate also.

Students Participate in Waste Management Programs

The NC Governor's Waste Management Board lists the work of six students or recent graduates in its 1986 annual report. **Kay Hawthorne**, ENVR, reviewed, evaluated and compared policies, statutes, regulations, and rules related to compensation and other incentives for communities hosting a waste management facility; **Susan Heaney**, ENVR 1986, analyzed the Department of Natural Resources & Community Development, NC Division of Environmental Management, spill reports; **Dona Huang**, HPAA, analyzed results of an industry survey on need for waste facilities, surveyed the impacts of 1984 RCRA amendments on NC hazardous waste generators and investigated optimum institutional arrangement for a hazardous waste management facility; **Leah B. Jung**, ENVR 1987, reviewed regulations of hazardous waste/hazardous

material transportation in other states; **Willie Lee**, ENVR 1986, reviewed and evaluated alternatives to shallow-land burial for low-level radioactive waste; **Jill Moore**, HEED 1985, developed and updated public education material on hazardous waste and low-level radioactive waste, conducted a teachers' conference evaluation, assisted in planning, developing, implementing and evaluating a media workshop on hazardous waste and low-level radioactive waste, and prepared and presented a seminar on teaching aids on toxic substances and hazardous waste. A BSPH graduate, Jill is enrolled in the MPH program in health education.

Personnel Changes

Appointments:

To Assistant Professor:

Timothy M. Morgan, BIOS, Oct. 1987, held a position in the Oncology Research Center, Wake Forest University, Winston-Salem, NC before coming to UNC.

To Research Assistant Professor:

Carol Runyan, HEED, Oct. 1986, received the PhD degree from UNC in 1983, has taught at the UNC School of Medicine, and completed a postdoctoral fellowship at the Johns Hopkins University. She is assistant director, UNC Center for Health Promotion & Disease Prevention and chair, Injury Prevention Task Force.

To Information & Communication Specialist:

Rebecca Zoe Ulshen, DCHS, returns to the Division after receiving the MSW from the UNC-CH School of Social Work and the MA from the School of Journalism.

Promotions:

To Professor:

Avram Gold, ENVR, July 1987. A member of the Lineberger Cancer Research Center, he has studied the link between molecular structure and cancer potential since 1982. He recently received a five-year grant from the American Cancer Society to study mechanisms of biological activation of carcinogens.

Mildred Kaufman, NUTR, Jan. 1987, was previously public health nutrition program supervisor and WIC program director in Florida before coming to UNC in 1978. She has served as consultant for national and state committees on nutrition, arranged and supervised the block field experience for all MPH students in nutrition and directed the NUTR training project, a grant from the March of Dimes, to improve the health of migrant mothers and children.

Resignations:

Marilyn Asay, PHNU, July 1987 to accept a position as school health nurse consultant, Maternal and Child Health Branch, NC Division of Health Services, Raleigh.

William A. Forsythe, NUTR, Aug. 1986 to accept a position at the University of Southern California.

Marsha Gold, HPAA, Aug. 1987 to assume the position of director of research and development, Group Health Association of America, Inc., Washington, DC.

James D. Knoke, BIOS, Sept. 1987 to accept a position as research professor, Biostatistics Center, George Washington University.

Tony L. Whitehead, HEED, Sept. 1987 to accept a position as chair, Department of Anthropology, University of Maryland, College Park. On leave from Sept. 1987 to August 1988 at the National Center for Scientific Research in Pau, France, he will be a member of a research team studying the relationship of food and culture.

Leaves of Absence:

James E. Grizzle, BIOS, on Kenan leave from July to Dec. as visiting professor at the University of Washington, Seattle.

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