

Annual Report
 July 1, 1992 - June 30, 1993
 Department of Epidemiology

I. DEPARTMENT ORGANIZATION AND ADMINISTRATION.

Support Staff

(as of June 30, 1993)

Administrative Staff

Gail King	Administrative Manager
Joyce Allen	Registrar
Nancy Colvin	Assistant Registrar
Carolyn Cooke	Fiscal Manager
Stephanie Miller	Accounting Technician
Crystal Burnett	Accounting Technician
Amy Webb	Accounting Technician
Phyllis Johnson	Administrative Assistant
Lesa McPherson	Administrative Assistant

Secretarial Staff

Virginia Reid	Secretary IV
Edna Lennon	Secretary IV
Betsy Seagroves	Secretary IV
Mimi Haebig	Secretary IV
Carmen Woody	Secretary IV
Jane Foust	Secretary IV
Carol Morton	Secretary IV
Anne Crumpler	Secretary IV
Kathy Sutton	Clerk/Typist IV
Susan Reel	Clerk III

Research Staff

Lorraine Alexander	Research Associate
Marilyn Knowles	Social Research Assistant
Catherine Paton	Social Research Assistant
Susanne Wolf	Research Associate
Darrah Degnan	Social Research Associate
Jadis Robinson	Social Research Assistant
Charylmayne Alston	Social Research Assistant

Data Processing Staff

Terry Hudgins	Applications Analyst Programmer
Robert Kleckner	Applications Analyst Programmer
Veda Manley	Data Processing Coordinator
Vic Rhodes	Applications Analyst Programmer
Joy Wood	Applications Analyst Programmer
Eileen Gregory	Applications Programmer
Richard Howard	Applications Analyst Programmer
Joanna Smith	Applications Analyst Programmer
Stephanie Watkins	Applications Programmer
Debra Weiner	Statistician

Employee Terminations

Larry De Matas, Applications Programmer, Layoff
 Carol Janney, Statistician, Resignation
 Baldev Krishan, Social Research Assistant, Resignation
 Eloise Parrish, Research Technician, Resignation
 Joan Shields, Research Technician, Layoff

II. Faculty and Students

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

1. Full-Time Faculty

Ralph S. Baric, Assistant Professor
 Kathleen Conway, Research Assistant Professor
 *Primary dpt.?
 Hilton Goulson, Professor
 J. Ed Hall, Associate Professor
 Gerardo Heiss, Professor
 Irva Hertz-Picciotto, Assistant Professor
 Barbara S. Hulka, *Kenan Professor & Chair, Epidemiology
 Clinical Professor, Family Medicine
 Adjunct Professor of Community and Family
 Medicine, Duke University Medical Center
 Michel A. Ibrahim, DEAN, School of Public Health
 *Professor, Epidemiology
 Professor, Social and Administrative Medicine
 Berton H. Kaplan, Professor
 Lenore Kohlmeier, Professor
 *Professor, Nutrition
 Lester Lee, Research Assistant Professor
 Edison Liu, Associate Professor
 *Associate Professor, Medicine
 Dana Loomis, Research Assistant Professor
 Beth Newman, Assistant Professor
 Jennifer Ratcliffe, Research Associate Professor
 Wayne Rosamond, Assistant Professor
 Rachel Royce, Assistant Professor
 David A. Savitz, Associate Professor
 Victor J. Schoenbach, Associate Professor
 J. Richard Seed, Professor
 Cecil G. Sheps (Emeritus), Professor, Epidemiology
 *Professor, Social and Administrative Medicine
 Carl M. Shy, *Professor, Epidemiology
 Professor, Environmental Sciences and Engineering
 Clinical Professor, Family Medicine
 Lola Stamm, Assistant Professor
 James Thomas, Assistant Professor
 Herman A. Tyroler, Alumni Distinguished Professor
 Marilyn Vine, Research Assistant Professor
 David Weber, *Assistant Professor, Medicine
 Assistant Professor, Epidemiology
 Kristen Weigle, Assistant Professor
 Steven B. Wing, Research Assistant Professor

2. Part-Time Faculty

Christine Moe, Research Assistant Professor

3. Visiting Faculty
 - Kyle Steenland
 - Bruce Duncan

4. Adjunct and Fixed-Term Joint Appointments
 - Timothy Aldrich, Adjunct Assistant Professor
 - Naomar Almeida-Filho, Adjunct Associate Professor
 - Dragna Andjelkovich, Adjunct Associate Professor
 - Elizabeth Andrews, Adjunct Assistant Professor
 - Michael H. Arrighi, Adjunct Assistant Professor
 - Donna Baird, Adjunct Assistant Professor
 - John Barefoot, Adjunct Associate Professor
 - James C. Barrett, Adjunct Professor
 - James Beck, Adjunct Assistant Professor
 - Richard A. Berzon, Adjunct Assistant Professor
 - Dan German Blazer, Adjunct Professor
 - Brian A. Boehlecke, Clinical Associate Professor
 - Jeffrey A. Boyd, Adjunct Assistant Professor
 - W. Eugene Broadhead, Adjunct Assistant Professor
 - James Trig Brown, Adjunct Assistant Professor
 - Timothy S. Carey, Clinical Associate Professor
 - *Associate Professor, Medicine
 - Douglas S. Campbell, Adjunct Assistant Professor
 - Dennis A. Clements, III, Adjunct Assistant Professor
 - Thomas Cole, Adjunct Assistant Professor
 - Joan Cornoni-Huntley, Adjunct Professor
 - John R. Crouse, Adjunct Associate Professor
 - Clin. Professor, Medicine and Family Medicine
 - *Adjunct Prof., Social and Administrative Medicine
 - Frank Crout, Adjunct Assistant Professor
 - Deborah Dawson, Adjunct Assistant Professor
 - Gordon H. DeFries, Clinical Professor, Epidemiology
 - *Professor, Social and Administrative Medicine
 - Richard B. Everson, Adjunct Professor
 - Robert Fletcher, Clinical Professor
 - Judith A. Fortney, Adjunct Associate Professor
 - Jean French, Adjunct Professor
 - Joanne Garrett, Adjunct Research Instructor
 - Peter Garrett, Adjunct Assistant Professor
 - Richard C. Graves, Research Associate Professor
 - Raymond S. Greenberg, Adjunct Associate Professor
 - Jack Griffith, Adjunct Professor
 - Harry A. Guess, Adjunct Professor
 - Curtis G. Hames, Clinical Professor
 - Russell P. Harris, Adjunct Assistant Professor
 - *Research Assistant Professor, Medicine
 - Carl G. Hayes, Adjunct Professor
 - Siegfried H. Heyden, Adjunct Professor
 - Michael Hogan, Adjunct Associate Professor
 - Ronald J. Hunt, Clinical Professor
 - *Professor, Dental Ecology
 - Nancy Hunter, Adjunct Assistant Professor
 - Debra E. Irwin, Adjunct Assistant Professor
 - Sherman James, Adjunct Professor
 - Eric S. Johnson, Adjunct Assistant Professor
 - Lorraine Johnson, Adjunct Assistant Professor
 - Ulrich Keil, Adjunct Professor

Suzanne Landis, *Adjunct Assistant Professor
 Clinical Assistant Professor, Medicine
 Eugene J. Lengerich, Adjunct Assistant Professor
 Richard J. Levine, Adjunct Associate Professor
 Ruth E. Little, Adjunct Professor
 J. Newton MacCormack, Adjunct Associate Professor
 Peter Margolis, Clinical Assistant Professor
 Margaret F. McCann, Adjunct Assistant Professor
 William F. McDonnell, Adjunct Associate Professor
 Melinda S. Meade, Adjunct Professor, Epidemiology
 *Professor, Geography
 Wilbur Milhous, Adjunct Associate Professor
 Dexter Morris, Adjunct Assistant Professor
 Azmi A. Nabulsi, Adjunct Assistant Professor
 George R. Parkerson, Adjunct Associate Professor
 Miquel Porta, Adjunct Associate Professor
 David F. Ransohoff, Clinical Professor
 Walter J. Rogan, Adjunct Associate Professor
 Michael J. Rosenberg, Adjunct Associate Professor
 Carol Runyan, Adjunct Associate Professor
 Desmond K. Runyan, Clinical Assistant Professor
 Gregory Samsa, Adjunct Assistant Professor
 Dale Sandler, Adjunct Associate Professor
 Robert S. Sandler, Clinical Associate Professor Epidemiology
 *Associate Professor, Medicine
 Joellen M. Schildkraut, Adjunct Assistant Professor
 David Sheps, Clinical Professor
 Ilene C. Siegler, Adjunct Associate Professor
 Philip Sloane, Clinical Associate Professor
 David C. Sokal, Adjunct Assistant Professor
 C. Gregory Smith, Adjunct Assistant Professor
 John Stamm, Adjunct Professor
 *Professor and Dean, Dentistry
 Paul E. Stang, Adjunct Assistant Professor
 David Strogatz, Adjunct Assistant Professor
 Michael R. Swift, Clinical Professor, Epidemiology
 *Professor, Medicine
 Patricia Tennis, Adjunct Assistant Professor
 Hugh H. Tilson, Adjunct Professor
 James F. Toole, Adjunct Professor
 Christine Uhlinger, Adjunct Assistant Professor
 Edward H. Wagner, Clinical Professor
 Hetty Waskin, Adjunct Assistant Professor
 Jane Weintraub, Adjunct Associate Professor
 Alice White, Adjunct Assistant Professor
 Allen J. Wilcox, Adjunct Professor
 Mark E. Williams, Clinical Associate Professor, Epidemiology
 *Associate Professor, Medicine
 Redford Williams, Adjunct Professor
 Bonnie C. Yankaskas, Adjunct Assistant Professor

B. Changes During the Year.

1. Additions.

Dr. Edison Liu, Assistant Professor, with a primary appointment in the Department of Medicine
 Dr. Lester Lee, Research Assistant Professor
 Dr. Christine Moe, Research Assistant Professor
 Dr. Kathleen Conway, Research Assistant Professor

2. Promotions, effective 1991/92
None

3. Changes in Rank:
Barbara S. Hulka, M.D. stepped down as Chair of the department

4. Leaves:
Dr. Steven B. Wing

5. Losses: Resignations
Dave Kleinbaum, Professor

Losses: Retirement
None

C. Honors

Faculty Honors

Dr. Gerardo Heiss received the School of Public Health's Greenberg Excellence in Teaching Award.

Staff Honors

Dr. Lorraine Alexander has been awarded the most meritorious American Heart Association, North Carolina Affiliate postdoctoral fellowship. This is a two year funded project.

Student Honors

Sara Ephross received the Sidney Kark Award for Distinguished Teaching Assistance.

Jeffrey Sonis joined a medical team from the independent monitoring organization Physicians for Human Rights.

Delta Omega Book Award: Myra Tucker

Delta Omega Service Award: Holly Hill

Delta Omega Membership: Michael Arrighi, Sara Ephross, Holly Hill

III. Instructional Programs

Program Changes

There are no major changes in the courses or curricula. There are no new programs or deleted programs.

Learning Objectives

The dimensions in the training of an epidemiologists has eight contributing parts and they are as follows:

Epidemiologic Perspective: This has two aspects, professional and scientific. The Professional aspects is the history of epidemiology, epidemiology as a public health science, slinical and public policy implications. The Scientific aspect is the problem conceptualization, philosophy of inference, study designs, interpretation of data, concepts of bias and multicausality.

Measurement and Analysis: Measures of disease frequency and extent, study designs and strategies, control of sources of error, statistical inference, data analysis and interpretation.

Weighing Epidemiologic Evidence: Critical reading and synthesizing of information.

Proposal Development: Specification of research hypotheses, study populations, measurement tools, analysis strategies; human subjects; "grantsmanship".

Study Design and Execution: Protocol development, subject recruitment, instrumentation, data collection, quality control, reporting and communications collaboration and working iwth oversight bodies, presentation of findings.

Data Processing: Manipulation and analysis of data using computers and statistical software packages.

Substantive Knowledge: General background in health-related sciences and multidisciplinary understanding of specific areas of research.

Practice of Epidemiology: Development of skills for teaching, consultation, review of proposals and manuscripts, participation in professional meetings, leadership of multidisciplinary research teams, and continuing professional development.

Field Training

Field training experience in Epidemiology is not handled through the method of placement with an agency or institution. Students enter the program with satisfactory research experience and/or work individually with faculty or adjuncts in ongoing research projects.

IV. RESEARCH PROGRAMS

Grant Awards

Cardiovascular Epidemiology Training Grant, PI: **Gerardo Heiss**, National Institutes of Health. \$242,013.

Community Structure and Cardiovascular Mortality Trends, PI: **Steven Wing**, National Institutes of Health, National Heart, Lung, and Blood Institute, \$416,038.

Coronavirus-induced myocarditis and dilated cardiomyopathy, PI: **Ralph Baric**, American Heart Association, \$108,000.

Dose-Response Assessment Issue in Occupational Studies, PI: **Irva Hertz-Picciotto**, NIOSH, \$13,400.

Epidemiologic Study of Utility Workers Exposed to Electric and Magnetic Fields, PI: **David Savitz**, EPRI, Inc., \$5,567,000.

Epidemiology of Pregnancy Outcome in a Textile Community, PI: **David Savitz** NICHD, \$452,377.

Family and Genetic Studies in Cardiovascular Diseases, PI: **Gerardo Heiss**, National Institutes of Health, National Heart, Lung, and Blood Institute, \$2,308,504.

Fulbright Scholars Award, PI: **Rachel Royce**, Council for International Exchange of Scholars,

Genetic Susceptibility and Dietary Factors in the Etiology of Ovarian Cancer, PI: **Barbara Hulka** AIRC, \$89,676.

Genetic Susceptibility and Dietary Factors in Ovarian Dysfunction: Galactose Consumption and Metabolism, PI: **David Savitz**, March of Dimes Birth Defects Foundation, \$30,618.

Health and Mortality Studies of Department of Energy Contract Facility Employees, PI: **Carl Shy**, Department of Energy, \$216,212.

High Density Lipoprotein Cholesterol and Breast Cancer, PI: **Barbara Hulka**, National Cancer Institute, \$49,989.

Interdisciplinary Studies of Leishmaniasis, PI: **Kristen Weigle**, National Institutes of Health, \$46,854.

Mercury and Reproductive Health in Women Dentists, PI: **David Savitz** National Institute of Dental Research, \$34,245.

Parental Occupation and Pregnancy Outcome: Analysis of the National Maternal and Infant Health Survey, PI: **David Savitz**, March of Dimes Birth Defects Foundation, \$34,245.

Paternal Occupation and Risk of Birth Defects in Offspring, PI: **Andrew Olshan**, March of Dimes Birth Defects Foundation, \$30,000.

Phenoxy Herbicides and Spontaneous Abortions in Ontario, PI: **David Savitz**, NIEHS, \$182,571.

Postprandial Lipoproteins and Atherosclerosis, PI: **Gerardo Heiss**, National Institutes of Health, National Heart, Lung, and Blood Institute, \$10,778,850.

Predictors of Coronary Disease in Blacks, Medical University of South Carolina, PI: **Herman Tyroler** National Institutes of Health, \$185,749.

Rare HA-RAS Alleles and Breast Cancer, PI: **Barbara Hulka**, National Cancer Institute, \$141,687.

Red Blood Cells and Hemoglobin Adducts, PI: **Marilyn Vine**, American Cancer Society, \$66,098.

Research to Advance Environmental Epidemiology, PI: **Barbara Hulka**, Environmental Protection Agency, \$3,347,670.

Respiratory Effects of Waste Incinerators, PI: **Carl Shy**, Center for Disease Control/ATSDR, \$1,660,378.

Studies into the mechanism of MHV replication, PI: **Ralph Baric** National Institutes of Health, \$895,500.

Studies into the mechanism for mefloquine resistance in plasmodium falciparum in vitro, PI: **Ralph Baric**, North Carolina Biotechnology Center, \$40,000.

Study of Multiple Myeloma Among Workers Exposed to Ionizing Radiation and Other Physical and Chemical Agents, PI: **Steve Wing**, Centers for Disease Control.

Timing of Tumor Surgery during the Menstrual Cycle & Survival Among Pre-Menopausal Breast Cancer Patients, PI: **Barbara Hulka**, Cancer Research Foundation of America, \$35,000.

Publications

Alexander LK, Small JD, Edwards SW, Baric RS. An experimental model for dilated cardiomyopathy following rabbit coronavirus infection. *Journal Infectious Diseases*; 1992; 166: 978-985.

Alexander LK, Keene B, Small JD, Baric RS. Electrocardiographic changes associated with rabbit coronavirus induced myocarditis and dilated cardiomyopathy. *Adv Exp Med Biol*; 1993; In Press.

Ambinder RF, Browing PJ, Mann RB, Lorenzana I, Levanthal B, Cosenza H, MacMahon E, Medina R, Cardona V, Grufferman S, Olshan A, Levin A, Petersen EA, Blattner W, Levine PH. Epstein-Barr Virus and childhood Hodgkin's Disease in Honduras and the United States. *Blood*; 1992; 81(462-467).

Austin MA, Newman B, Selby JV, Edwards K, Mayer E, Krauss RM. Genetics of low-density lipoprotein subclass phenotypes in women twins: concordance, heritability, and commingling analysis. *Arteriosclerosis & Thrombosis*; 1993; In press.

Austin MA, Newman B. Letter. *New England Journal of Medicine*; 1993.

Austin MA, Sandholzer C, Selby JV, Newman B, Krauss RM, Utermann G. Lipoprotein(a) in women twins: Heritability and relationship to apolipoprotein(a) phenotypes. *American Journal of Human Genetics*; 1992; 51: 685-690.

Blackmore CA, Savitz DA, Edwards I, Harlow S, Bowes W. Racial differences in the rates of idiopathic preterm labor, preterm premature rupture of membranes, and medically indicated preterm delivery in central North Carolina. *American Journal of Epidemiology*; 1992; 136: 980.

Blatt J, Olshan AF, Gula MJ, Dickman PS, Zaranek B. Second malignancies in very long term survivors of childhood cancer. *American Journal of Medicine*; 1992; 93: 57-60.

Brenner H, Greenland S, Savitz DA. The effects of nondifferential confounder misclassification in ecologic studies. *Epidemiology*; 1992; 5: 456-459.

Brenner H, Savitz DA, Jockel KH, Greenland S. Effects of nondifferential exposure misclassification in ecologic studies. *American Journal of Epidemiology*; 1992; 135: 85-95.

Breslow N, Olshan A, Beckwith JB, Green DM. Epidemiology of Wilms tumor. *Medical & Pediatric Oncology*; 1993; 21: 172-181.

Brewster MA, Hulka BS, Lavy TL. Biomarkers of pesticide exposure. In: *Reviews of Environmental Contamination and Toxicology*. New York, NY: Springer-Verlag Inc.; 1992.

Coker AL, Hulka BS, McCann MS, Walton LA. Barrier methods of contraception and cervical intraepithelial neoplasia. *Contraception*; 1992; 45(1): 1-10.

Coker AL, McCann M, Hulka BS. Oral contraceptives and cervical intraepithelial neoplasia. *Journal of Clinical Epidemiology*; 1992; 45(10): 1111-1118.

Coker AL, Rosenberg AJ, Hulka BS, McCann MF. Active and passive cigarette smoke exposure and high grade cervical squamous intraepithelial lesions. *Cancer Epidemiology, Biomarkers and Prevention*; 1992; 1: 349-356.

Deeb S, Pairitz G, Yang M, Selby J, Newman B, Fabsitz R, Arwerx J, Austin M. Effects of apolipoprotein E isoforms on apolipoprotein B and lipid levels are not seen in older male twins. *American Journal of Human Genetics*; 1992; 51: A337.

- Dovan T, Kaune WT, Savitz DA. Repeatability of measurements of residential magnetic fields and wire codes. *Bioelectromagnetics*; 1993; 14: 145-159.
- Edwards W, Small JD, Geratz D, Alexander LK, Baric RS. A model for virus-induced myocarditis and congestive heart failure in rabbits. *J Infectious Diseases*; 1992; 165: 134-140.
- Feingold L, Savitz DA, John EM. Use of a job-exposure matrix to evaluate parental occupation and childhood cancer. *Cancer Causes and Control*; 1992; 3: 161-169.
- Fu K, Baric RS. Evidence for variable rates of recombination in the MHV genome. *Virology*; 1992; 189:88-102.
- Garrett PA, Hulka BS, Kim YL, Farber RA. HRAS Protooncogene polymorphism and breast cancer. *Cancer Epidemiology, Biomarkers and Prevention*; 1993; 21: 131-138.
- Goldman LR, Gomez M, Greenfield S, Hall L, Hulka BS. Use of exposure databases for status and trends analysis. *Arch Environ Health*; 1992; 47(6): 430-438.
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- Hillis S, Miranda C, McCann M, Bender D, Weigle KA. Effect of day care attendance on child growth and the incidence of acute diarrheal and respiratory illness in Sincelejo, Colombia. *Pediatrics*; 1992; 90: 582-588.
- Hulka BS, Margolin BS. Methodological issues in epidemiologic studies using biologic markers. *American Journal of Epidemiology*; 1992; 135: 100-109.
- Hulka BS, Schildkraut JM. North Carolina studies of oestrogens, oestrogen receptors and breast cancer. In: *Hormone Replacement Therapy and Breast Cancer Risk*. RD Mann ed.: The Parthenon Publishing Group; 1992.
- Irwin D, Savitz D, St. Andre K, Hertz-Picciotto I. Occupational risk factors for pregnancy-induced hypertension in active duty naval personnel. *American Journal of Epidemiology*; 1992; 136:1001-1002.
- Kaplan BH. Social health and the forgiving heart: the type B story. *Journal of Behavioral Medicine*; 1992; 15: 3-14.
- Klonoff-Cohen H, Edelstein S, Savitz D. Cigarette smoking and preeclampsia. *American Journal of Obstetrics and Gynecology*; 1993; 81: 541-544.
- Lansky A, Thomas JC, Earp JA. Visits to private physician in urban North Carolina for sexually transmitted diseases. *North Carolina Med J*; 1992: 427-430.
- Lewtas J, Mumford J, Everson RB, Hulka B, Wilcosky T, Kozumbo W, Thompson C, George M, Dobias L, Sram R, Li X, Gallagher J. Comparison of DNA adducts from exposure to complex mixtures in various human tissues and experimental systems. *Environmental Health Perspectives*; 1993; 99: 89-97.
- Linn S, Savitz DA, Bowes WA, Cross AW, Kaplan BH, Kotelchuck M. The effect of maternal oxytocin infusion during labor on the neonatal hyperbilirubinemia. *American Journal of Epidemiology*; 1992; 136: 974.
- Mayer EJ, Newman B, King MC, Selby JV. Genetic susceptibility and associations of obesity and fat patterning with insulin concentrations in monozygotic (MZ) women twins. *American Journal of Epidemiology*; 1992; 136: 983.

- McCann MF, Irwin DE, Walton LA, Hulka BS, Morton JL, Axelrad CM. Nicotine and cotinine in cervical mucus. *Cancer Epidemiology, Biomarkers and Prevention*; 1992; 1: 125-129.
- Moorman PG, Hulka BS. Menopausal hormones and the risk of breast cancer. *The Endocrinologist*; 1992; 2(3): 189-194.
- Morrison H, Savitz D, Semenciw R, Hulka B, Mao Y, Wigle D. Farming and prostate cancer mortality. *Amer J Epidemiol*; 1993; 127: 270-280.
- Morrison H, Savitz D, Semenciw R, Hulka B, Mao Y, Morrison D, Wigle D. Farming and prostate cancer mortality. *American Journal of Epidemiology*; 1993; 137: 270-280.
- O'Shea M, Savitz DA, Hage ML, Feinstein KA. Perinatal events and the risk of subependymal intraventricular hemorrhage in very low birth weight neonates. *Paediatric and Perinatal Epidemiology*; 1992; 6: 352-362.
- Olshan AF. Male-mediated developmental toxicity: Epidemiology evidence. *The Toxicologist*; 1993; 13:28.
- Olshan AF, Faustman E. Male-mediated development toxicity. *Annual Review of Public Health*; 1993; 14:159-181.
- Olshan AF, Schnitzer PG, Baird PA. Paternal age and the risk of congenital cardiac defects. *Teratology*; 1993; 47: 431.
- Rowland A, Baird D, Shore D, Weinberg C, Savitz D, Wilcox A. Nitrous oxide associated with spontaneous abortion in female dental assistants. *American Journal of Epidemiology*; 1992; 136:974.
- Savitz DA. Health effects of low-frequency electric and magnetic fields. *Environmental Science & Technology*; 1993; 27: 52-54.
- Savitz DA. Is significance testing useful in interpreting data? *Reproductive Toxicology*; 1993; 7:95-100.
- Savitz DA. Overview of epidemiologic research on electric and magnetic fields and cancer. *American Industrial Hygiene Association Journal*; 1993; 54: 197-204.
- Savitz DA. Response to Mundt letter re: "Exposure to residential electric and magnetic fields and risk of childhood leukemia" and "Case-control study of childhood cancer and exposure to 60-Hz magnetic fields". *American Journal of Epidemiology*; 1992; 135(1071-1073).
- Savitz DA, Kaune WT. Childhood cancer in relation to a modified residential wire code. *Environmental Health Perspectives*; 1993; 101: 76-80.
- Savitz DA, Poole C, Tolo KA. Statistical significance testing practices in the *American Journal of Epidemiology*. *American Journal of Epidemiology*; 1992; 136: 990.
- Savitz DA, Sonnenfeld N, Olshan A. Review of epidemiologic studies of paternal exposure and spontaneous abortion. *American Journal of Industrial Medicine*; 1993; In press.
- Savitz DA, Zhang J, Schwingl P, John EM. Association of paternal alcohol use with gestational age and birth weight. *Teratology*; 1992; 46: 465-471.
- Savitz DA, Zhang J. Pregnancy-induced hypertension in North Carolina, 1988-1989. *American Journal of Public Health*; 1992; 82: 675-679.

Shen CY, Chang SF, Yang SL, Lin GM, Chang WW, Wu CW, Yen MS, Ng HT, Thomas J, Haug ES. Cytomegalovirus recurrence in seropositive pregnant women attending obstetric clinics. *J Med Virol*; 1993.

Siegler IC, Peterson BL, Kaplan BH, Dahistrom WG, Harvin SH, Barefoot JC, Wing SB, Williams Jr. RB. Hostility as a predictor of findability, locatability, and participation in the UNC Alumni Heart Study. *American Journal of Epidemiology*; 1992.

Siegler IC, Peterson BL, Barefoot JC, Harvin SH, Dahistrom WG, Kaplan BH, Costa PT, Williams RB. Using college alumni populations in epidemiologic research: The UNC Alumni Heart Study. *American Journal of Epidemiology*; 1992.

Stevens R, Savitz D. Electromagnetic fields and cancer: it is an issue worthy of study? *Cancer*; 1992; 69: 603-609.

Thomas JC, Bendana N, Waterman SW. Meningococcal diseases in Los Angeles County, 1981-1990. *Amer J Public Health*; 1993.

Thomas JC, Neumann CN. Choosing an appropriate measure of diarrhea occurrence, with examples from a community-based study in rural Kenya. *Int J Epid*; 1992; 21: 589-593.

Vine MF, Hulka BS, Margolin BH, Truong YK, Hu PC, Schramm MM, Griffith JD, McCann M, Everson RB. Cotinine levels in semen, urine and blood of smokers and nonsmokers. *Amer J Public Health*; 1993; 89(9).

Watenberg D, Savitz DA. Evaluating exposure cutpoint bias in epidemiologic studies of electric and magnetic fields. *Bioelectromagnetics*; 1993; 14: 237-245.

Wheat JR, Graney MJ, Schachtman RH, Ginn GL, Patrick DL, Hulka BS. Does workplace health promotion decrease medical claims? *American Journal of Preventive Medicine*; 1992; 8: 110-114.

Zapata BC, Rebolledo A, Atalah E, Newman B, King MC. An epidemiologic study of the influence of social and political violent on the risk of pregnancy complications. *American Journal of Public Health*; 1992; 82: 685-690.

Zhang J, Savitz DA, Schwingl PJ. Case-control study of paternal smoking and birth defects. *International Journal of Epidemiology*; 1992; 21: 273-278.

Zhang J, Savitz DA. Maternal age and placenta previa: a population-based case-control study. *American Journal of Obstetrics and Gynecology*; 1993; 168: 641-645.

Zhang J, Savitz DA. Preterm birth subtypes among blacks and whites in North Carolina. *Epidemiology*; 1992; 5: 428-433.

TABLE 8
 FACULTY CHANGES BY DEPARTMENT*
 1992-93

<u>Department/Curriculum</u>	<u>Additions</u>	<u>Promotions</u>	<u>Leaves</u>	<u>Resignations</u>	<u>Retirements</u>	<u>Deaths</u>
Health Policy and Administration						
Biostatistics						
Environmental Sciences and Engineering						
Epidemiology	4	0	1	1	0	0
Health Behavior and Health Education						
Maternal and Child Health						
Public Health Nursing						
Nutrition						
TOTAL						

*Full-time faculty only. See individual departments for rank and specialization.

TABLE 10
 PUBLICATIONS OF FACULTY BY DEPARTMENT
 1992-93

Department/Curriculum	No. Faculty	No. Publishing	No. Publications
Health Policy and Administration			
Biostatistics			
Environmental Sciences and Engineering			
Epidemiology	29	10	64
Health Behavior and Health Education			
Maternal and Child Health			
Public Health Nursing			
Nutrition			
TOTAL			

DEPARTMENT OF EPIDEMIOLOGY

CHAIRPERSON
Barbara S. Hulka, M.D.

Administrative Officer
Gail King
(Univ. Adm. Mgr. II)
09094

Faculty Support
(22 Faculty)

Fiscal Operations

Student Services

Graduate Studies Committee

Registrar
Joyce Allen
(Stud. Ser. Mgr. I)
30353

Assist. Registrar
Nancy Colvin
(Clerk IV)
30312

Fiscal Office Mgr.
Carolyn Cooke
(Acct. Tech. III)
06259

Fiscal Office

Stephanie Miller
(Acct. Tech. II)
36350

Crystal Burnette
(Acct. Tech. I)
09185

Amy Webb
(Acct. Tech. I)
32554

Coordinator for Faculty Affairs & Clerical Staff
Lesa McPherson
(Admin. Assist. I)
36436

Secretarial Staff

Jimmy Reid (Sec. IV) 30699	Betsy Seagroves (Sec. IV) 32124	Carol Morton (Sec. IV) 09027	Edna Lennon (Sec. IV) 32751	Jane Foust (Sec. IV) 33946	Mimi Haebig (Sec. IV - 30 hours) 09451	Anne Crumpler (Sec. IV) 06457	Kathy Suttion (Clerk/Typist IV) 35056	Susan Reel (Clerk III) 36348
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Administrative Assistant
Phyllis Johnson
(Admin. Asst. I - CVD Group)
33895

Carmen Woody
(Sec. IV - 30 hours)
33452

Computer Systems Manager
Terrill Hudgins
Appl. Analyst Prog. II
30974

Computer Staff

Robert Kleckner (App. Analyst Prog. I) 35223	Victor Rhodes (App. Analyst Prog. I) 09629	Richard Howard (App. Analyst Prog. I) 35452	Joy Wood (App. Analyst Prog. I) (30 hours) 34986	Joanna Smith (App. Analyst Prog. I) 36253	New Position (App. Analyst Prog. I) 36524	Eileen Gregory (App. Prog. II) 32246	Stephanie Watkins (App. Prog. II) 35453	Larry Dumalas (App. Prog. II) 36255	Veda Manley (Data Proc. Coord. I) (30 hours) 30726
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Faculty Research

Computer Support Committee

Research Staff

Darrah Degnan (Soc. Res. Assoc. I) 34715	Debra Weiner (Statistician II) 36249	Marilyn Knowles (Soc. Res. Assist. II) 12120	Catherine Paton (Soc. Res. Assist. II) 35026	Eloise Parrish (Res. Tech. II) 34519	Joan Shields (Res. Tech. II) 36269	Vacant (Soc. Res. Assist. I) 34927	Jadis Robinson (Soc. Res. Assist. II) 36089	Charymayne Alston (Soc. Res. Assist. I) 36246	Vacant (Soc. Res. Assist. I) 33023
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