

CDE505A

**SOCIAL & BEHAVIORAL INFLUENCES ON HEALTH
JEANNETTE ICKOVICS, PH.D.**

TUESDAYS: 10:00-11:50PM --WINSLOW AUDITORIUM

This course provides an introduction to social and behavioral issues that influence patterns of health and health care delivery. The focus is on the integration of biomedical, social, psychological, and behavioral factors that must be taken into consideration when public health initiatives are developed and implemented. This course emphasizes the integration of research from the social and behavioral sciences with epidemiology and biomedical sciences.

Teaching Assistants:

Kristin Mattocks (Yale MPH '99, HPA)	737-2012	Kristin.Mattocks@Yale.edu
Lisa Calvocoressi (Doctoral candidate, CDE)	860/828-0516	Lisa.Calvocoressi@yale.edu

Please be respectful, call only between 8:00am and 8:00pm.

Office Hours:

Kristin Mattocks	SHM-IE-60	Wednesdays	12:00-2:00
		Fridays	12:00-2:00 (group discussion)
Lisa Calvocoressi	LEPH 415 conf rm.	Mondays	1:15-3:00 (beg. 9/13)

Dr. Ickovics' office hours will be Tuesdays, 12:00-2:00 pm* and by appointment, LEPH 415, (phone 5-6213). To make an appointment, the best way is to send an e-mail with the issue that you would like to discuss and the times that you are available within a 1-2 week period; I will schedule a meeting as quickly as possible. If you have any questions or need additional information, please do not hesitate to contact me. (*Please note: on the last Tuesday of the month, there is a faculty meeting from 12:00-1:00pm. I will be available from 1:00-2:00pm only).

Requirements (see last page of syllabus): Class participation, "concept sheet" (as first stage ideas for term paper), term paper, final take-home exam (directly from class notes/reading)

Reading list attached: Readings include a combination of review articles and empirical articles selected from top medical, public health, and health psychology journals. I have selected a broad range of reading to give you a broad overview and to cover topics of interest to many diverse students. Please be certain to read the readings marked with an asterisk -- these will form part of the foundation of our in-class discussion. You may be selective about the other readings, though I would encourage you to at least review the abstracts and skim all of the recommended readings. Average of required readings per week will be approximately 30 pages.

Course Website: (connect through EPH library website, library services, and course information)

You must register for the course on the website. Syllabus and other relevant information will be posted here.

- August 31:** **COURSE INTRODUCTION/ WHAT ARE "SOCIAL AND BEHAVIORAL SCIENCES" & WHAT ARE THE IMPLICATIONS FOR PUBLIC HEALTH?** This introductory class will review some of the basic principles of social and behavioral sciences, and set the stage for the rest of our semester. We will review basic principles of social and behavioral science research in public health, and discuss the importance of scientific findings guiding public policy and clinical care.
- September 7:** **PREVENTION**
The purpose of this class is to review basic public health perspectives on the importance of prevention, focusing on empirical studies that support primary and secondary prevention efforts for behavioral change, including studies of cost effectiveness of these efforts.
- September 14:** **SOCIAL CLASS, RACE AND ETHNICITY**
This class will focus on the broad distinctions and similarities of health between different population sub-groups: rich vs. poor, women vs. men, individuals of different racial and ethnic backgrounds. A rich and diverse empirical literature will be reviewed, and the implications for future public health programs, services and research will be considered.
- September 21:** **NOT FOR WOMEN ONLY - GENDER ISSUES IN CLINICAL RESEARCH AND CLINICAL CARE: IMPLICATIONS FOR PUBLIC HEALTH**
This class will focus on women's inclusion (and exclusion) from medical research. What are the implications for our understanding about the health and clinical care for both women and men? How might our understanding be enhanced by including women in more research, and how can we facilitate this process.
- September 28:** **THEORIES OF BEHAVIOR AND BEHAVIOR CHANGE**
In this session, we will discuss some of the major theories of behavior and Behavior change. We will examine how these have been applied to several areas of critical public health interest such as efforts to decrease tobacco use and increase exercise and weight loss programs. We will also address the importance of theories, in general, and consider when they can be used as a foundation for further understanding and intervention.
- October 5:** **BIOLOGY IS NOT DESTINY: THE IMPACT OF BEHAVIOR & THE ENVIRONMENT ON HEALTH**
Recent media attention has focused heavily on cutting-edge breakthroughs in genetics and basic science. While genetic technology and treatment have changed the face of medicine for the 21st century -- it is not the whole picture. Individual differences in behavior and the environment may be more important determinants of health, and they interact with genetics to have an impact on morbidity and mortality.

October 12:

SEX, DRUGS & ROCK & ROLL

Today we will discuss the public health issues associated with sex and drugs: the epidemic of sexually transmitted diseases (including AIDS), teen age pregnancy, use and abuse of nicotine, alcohol, and illicit drugs. Regarding rock and roll... open discussion on the role of the music industry and other media in promoting public health and public harm.

October 19:

SUCCESSFUL AGING

Research into aging has been revolutionized in the past decade. Rejecting The established approach of studying aging in terms of anticipated decline, we will identify factors that enable people to preserve and even enhance their mental and physical vitality later in life. We will consider how physical activity; mental stimulation, self-efficacy and interpersonal relationships can influence health at any age. [This lecture is in preparation for the EPH Core Lecture Series.]

October 26:

STRESS & HEALTH: PSYCHOLOGICAL AND PHYSIOLOGICAL EXPLANATIONS

Stress: it is among the most common of human experiences and can have a major impact on individual health. This class will discuss the importance of stress as it influences the onset, severity and recovery from disease. The neuroendocrine and immunological pathways by which stress operates to have its effects will be reviewed. This provides a model for how social and psychological factors can have an impact on physiological health.

November 2:

STRESS, EMOTIONS & CARDIOVASCULAR DISEASE (DR. MATTHEW BURG)

This class will pick up on issues from the last class on stress and health, but with a focus on cardiovascular disease - the leading cause of death for both women and men. We will specifically consider clinical implications and interventions that result from research on stress, emotions and cardiovascular disease.

November 9:

METHODS FOR SOCIAL & BEHAVIORAL SCIENCE RESEARCH/ DISCUSSION OF TERM PAPERS (LISA CALVOCORESSI & KRISTIN MATTOCKS)

This class will provide an overview of specific methodological issues that you need to consider when designing a research project in the social and behavioral sciences (e.g., study sample, basic procedures). You will have a chance to ask any questions regarding your term papers. There will also be an opportunity to review any issues addressed in previous classes that warrant further discussion.

November 16:

PSYCHOSOCIAL INFLUENCES ON HEALTH: DETERMINANTS & CONSEQUENCES (DR. PETER SALOVEY)

Beyond stress -- there is a broad array of empirical literature that indicates how other social and psychological factors influence health, including optimism, social support, depression and emotions. This literature will be reviewed and its implications for individual health and health interventions will be discussed.

November 23:

[No class --Thanks2ivin2 week]

**INTEGRATING PSYCHOSOCIAL & BIOMEDICAL MODELS OF HEALTH:
RESEARCH, CLINICAL CARE, & HEALTH POLICY**

The focus of this lecture is to re-establish the important links between social, psychological, behavioral and biomedical factors that influence individual and public health. The implications for research, clinical care and health policy will be considered. Specifically, how can research be used to influence clinical care and health policy; how have clinical care environments (including managed care organizations) integrated psychosocial and behavioral features into prevention and/or treatment decisions; and how is health policy developed and implemented taking into consideration a broad array of constituent interests?

COURSE REQUIREMENTS:

1. **Class participation (10%)**
2. **"Concept Sheet" (10%) - October 12**
As a first step in preparation for your term paper, you will submit a 2-3 page concept sheet that provides an overview of your planned paper. This should definitely include your "Specific Aims," some initial hypotheses, and a brief overview of the methodology (e.g., who, where, what). It may also include a brief (1-2 paragraphs) summary of the literature in your selected area of study. The purpose of this assignment is to get you thinking and planning your final paper early, and to provide sufficient feedback early enough in the process so that you can develop the best paper possible. Assignment handed out and discussed in class September 14.
3. **Term Paper (45%) -- November 16**
Assignment handed out and discussed in class September 14.
4. **Final examination: choice of 3 (brief) take home essays (350/0)**
Distributed (November 16 -- pre-Thanksgiving), due in Dr. Ickovics' office (EPH 415) no later than 5:00 pm December 7. These will be based entirely on material covered in class and class readings.

Please note: Grade of "Honors" will not be possible if any written assignments are handed in late.
Concept sheet due in class on October 12 -- 10:00 am Term paper due in class on November 16 -- 10:00 am Final exam due in my office mailbox on December 7 -- 5:00 pm

Essay -- Due in class, September 28 (25%)

Select a 1998 article from the popular press (i.e., newspaper or magazine) on any topic that links health outcomes to social, psychological or behavioral indicators. Some recent examples include the role of depression on outcomes following heart attacks or the controversy surrounding cigarette smoking (as a health damaging behavior) and cancer. You need to select an article that will lead you back to the original source (e.g., "as published this week in the New England Journal of Medicine"). In five double-spaced pages or less, describe the study based on the article (including specifics about the study design such as sample size, study participants and other information that influences your assessment of the quality of the study), and discuss the accuracy with which the popular press described the study. Focus the majority of your discussion on how the social psychological and/or behavioral factors were integrated (or not) into the description of the clinical/biomedical outcomes. Did each receive equal attention? Consider how the popular media translates research findings into public health guidelines.

*** Include copies of popular and scientific article with your essay.

*** See the following articles in your reading packet [last articles]

Moyer A, Greener S, Beauvais J & Salovey P. Accuracy of health research reported in the popular press: Breast cancer and mammography. Health Communication. 1995;7;147-161.

Brody, JE. A study guide to scientific studies. New York Times. 11 August 1998, p. F7.

(* Indicates required reading)

SELECTED COURSE READINGS - FALL 1999

SOCIAL AND BEHAVIORAL INFLUENCES ON HEALTH

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August 31: **COURSE INTRODUCTION/ WHAT ARE "SOCIAL AND BEHAVIORAL SCIENCES" & WHAT ARE THE IMPLICATIONS FOR PUBLIC HEALTH?**

- * Anderson NB- Integrating behavioral and social sciences research at the National Institutes of Health, U.S.A. Social Science and Medicine. 1997;44:1069-1071.
- * Compass BE, Keefe FJ, Haaga DAF, Leitenberg H, Williams DA. Sampling of empirically supported psychological treatments from health psychology: smoking, chronic pain, cancer, and bulimia nervosa. Journal of Consulting and Clinical Psychology. 1998;66:89-112.
- Marwick C. Managed care may feature behavioral medicine. JAMA; 1996;275:1144-1146.
- Gochman DS. Health Behavior Research: Definitions and Diversity. In D. Gochman (Ed.), Handbook of Health Behavior Research (Volume 1). 1997, pp. 3-20.

September 7: **PREVENTION**

- * McGinnis JM, Lee PR. Healthy People 2000 at Mid-Decade. JAMA. 1995;273:1123-29. See also editorial comments by Satcher & Hull (pp. 1149-50), Scutchfield & Hartman (pp. 1150-51).
- * Rich-Edwards JW, Manson JE, Hennekens CH, Buring JE. The primary prevention of coronary heart disease in women. New England Journal of Medicine. 1995;332:1758-1766.
- * Mehta RH, Eagle KA. Secondary prevention in acute myocardial infarction. British Medical Journal. 1998;316:838-842.
- * Rivara FP, Grossman DC, Cummings P. Injury prevention (parts I & II). New England Journal of Medicine. 1997;337:543-548, 613-618.
- * Kelly JA, Murphy DA, Sikkema KJ, et al. Randomised, controlled, community-level HIV-prevention intervention for sexual-risk behavior among homosexual men in US cities. Lancet. 1997;350:1500-1505.
- Grosskurth H, Mosha F, Todd J, et al. Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomized controlled trial. Lancet. 1995;346:530-536.
- Gilson L, Mkanje R, Grosskurth H, et al. Cost effectiveness of improved treatment services for sexually transmitted diseases in preventing HIV-1 infection in Mwanza Region, Tanzania. 1997;350:1805-1809.

O'Reilly KR, Piot P. Inter national perspectives on individual and community approaches to the prevention of sexually transmitted disease and human immunodeficiency virus infection. *Journal of Infectious Diseases*. 1996;174(suppl 2):S214-222.

Wolf AM, Colditz GA. Social and economic effects of body weight in the United States. *American Journal Clinical Nutrition*. 1996;63(suppl):466S-9S.

September 14: **SOCIAL CLASS, RACE AND ETHNICITY**

- * Adler NE, Boyce T, Chesney MA, Folkman S, Syme SL. Socioeconomic inequalities in health: No easy solution. *JAMA*. 1993;269:3140-3145.

 Adler NE, Boyce T, Chesney MA, et al. Socioeconomic status and health: The challenge of the gradient. *American Psychologist*. 1994;49:15-24.
- * Lantz PM, House JS, Lepkowski JM et al. Socioeconomic factors, health behaviors, and mortality: Results from a nationally representative prospective study of US adults. *JAMA*. 1998;279:1703-1708.
- * Geronimus AT, Bound J, Waidmann TA, Hillemeier MM, Burns PB. Excess mortality among Blacks and Whites in the United States. *New England Journal of Medicine*. 1996; 335:1552-1558.

 Flores G, Bauchner J, Feinstein AR, Nguyen U. The impact of ethnicity, family income, and parental education on children's health and use of health services. *American Journal of Public Health*. 1999;89:1066-1071.

 Lillie-Blanton M, Parsons PE, Gayle H, Dievier A. Racial differences in health: Not just black and white, but shades of gray. *Annual Review of Public Health*. 1996;17:411-448.
- * Diez-Roux AV, Nieto FJ, Muntaner C, et al. Neighborhood environments and coronary heart disease: A multilevel analysis. *American Journal of Epidemiology*. 1997; 146:48-63.

For further information (not included in packet), see also:

Williams DR, Collins C. US Socioeconomic and racial differences in health: Patterns and explanations. *Annual Review of Sociology*. 1995;21:349-386.

September 21: **NOT FOR WOMEN ONLY - GENDER ISSUES IN CLINICAL RESEARCH AND CLINICAL CARE: IMPLICATIONS FOR PUBLIC HEALTH**

- * Rodin J, Ickovics JR. Women's health: Review and research agenda as we approach the 21st Century. *American Psychologist*. 1990;45:1018-1034.
- * Craft N. Women's health is a global issue. *British Medical Journal*. 1997;315:1154-1157.

 Craft N. The childbearing years and after. *British Medical Journal*. 1997;315:1301-1304.

Van Wijk CMTG, Van Vliet KP, Kolk AM. Gender perspectives and quality of care: Towards appropriate and adequate health care for women. *Social Science and Medicine*. 1996;707-720.

- * Baldini EH, Strauss GM. Wornen and lung cancer: Waiting to exhale. *Chest*. 1997; 12:229S-234S.

- * Vaccarino V, Parsons L, Every NR et al. Sex-based differences in early mortality after myocardial infarction. *New England Journal of Medicine*. 1999;341:217-225.

Schulman KA, Berlin JA, & Harless W, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization. *New England Journal of Medicine*. 1999;340:618-626.

Thomas JL, Braus PA. Coronary artery disease in women: A historical perspective. *Archives of Internal Medicine*. 1998;158:333-337.

Nelson M, Nicolette J, Johnson K. Integration or evolution: Women's health as a model for interdisciplinary change in medical education. *Academic Medicine*. 1997;72:737-740.

September 28: **THEORIES OF BEHAVIOR AND BEHAVIOR CHANG**

- * AIDSCAP. Behavior Change -- A summary of four major theories. Arlington, VA: Behavioral Research Unit, Family Health International/AIDSCAP (August, 1996).

Rogers RW, Prentice-Dunn S. Protection motivation theory. In Gochman, *Handbook of Health Behavior Research* (Volume 1). 1997, pp. 113-132.

Maddux JE, DuCharme KA. Behavioral intentions in theories of health behavior. In Gochman, *Handbook of Health Behavior Research* (Volume 1). 1997, pp. 13 3 -15 1.

- * Berenson GS, Srinivasan SR, Bao W et al. Association between multiple cardiovascular risk factors and atherosclerosis in children and young adults. *New England Journal of Medicine*. 1998;338:1650-1656.

Andersen RE, Crespo CJ, Bartlett et al. Relationship of physical activity and television watching with body weight and level of fatness among children: Results from the Third National Health and Nutrition Examination Survey. *JAMA*. 1998;279:938-942.

- * Wynder EL. From the discovery of risk factors for coronary artery disease to the application of preventive measures. *American Journal of the Medical Sciences*. 1995;310(suppl):119S-122S.

- * Beresford SAA, Curry SJ, Kristal AR, Lazovich D, Feng Z, Wagner EH. A dietary intervention in primary care practice: The eating patterns study. *American Journal of Public Health*. 1997;87: 610-616.

- * Brownell KD, Marlatt GA, Lichtenstein E, Wilson GT. Understanding and preventing relapse. *American Psychologist*. 1986;41:765-82.

October 5:

BIOLOGY IS NOT DESTINY: THE IMPACT OF BEHAVIOR & THE ENVIRONMENT ON HEALTH

- * McGinnis JM, Foege WH. Actual causes of death in the United States. JAMA. 1993; 270:2207-2212.

Taylor SE, Repetti RL, Seeman T. Health psychology: What is an unhealthy environment and how does it get under the skin? Annual Review of Psychology. 1997:48-411-447.
- * Bjorntorp P. Obesity. Lancet. 1997;350:423-426.

Pate RR, et al. Physical activity and public health: A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. JAMA. 1995;273:402-407,
- * Dunn AL, Marcus BH, Garcia ME et al. Comparison of lifestyle and structured interventions to increase physical activity and cardiorespiratory fitness. JAMA. 1999;281:327-334.
- * Ornish D, Scherwitz LW, Billings JH, et al. Intensive lifestyle changes for reversal of coronary heart disease. JAMA. 1998;280:2001-2007

Plomin I, Owen MJ, McGuffin P. The genetic basis of complex human behaviors. Science. 1994;264:1733-1739.
- * Shpilberg O, Dorman JS, Ferrel RE, Trucco M, Shahar A, Kuller LH. The next stage: Molecular epidemiology. Journal of Clinical Epidemiology. 1997;50:633-638.

Sacks JJ, Nelson DE. Smoking and injuries: An overview. Preventive Medicine. 1994;23:515-520.

Battle EK, Brownell KD. Confronting a rising tide of eating disorders and obesity: Treatment vs. prevention and policy. Addictive Behaviors. 1996;21:755-765.

Mosher JF. The merchants, not the customers: Resisting the alcohol and tobacco industries' strategy to blame young people for illegal alcohol and tobacco sales. Journal of Public Health Policy. 16;412-432.

October 12:

SEX, DRUGS & ROCK & ROLL

- * Skim- Ozer EM, Brindis CD, Millstein SG, Knopf DK, Irwin CE. America's adolescents: Are they healthy? National Adolescent Health Information Center. 1998, pp. 1-48.
- * Single E, Robson L, Rehm J, Xi X. Morbidity and mortality attributable to alcohol, tobacco and illicit drug use in Canada. American Journal of Public Health. 1999;89:385-390.
- * Jemmott JB, Jemmott LS, Fong GT. Abstinence and safer sex HIV risk-reduction interventions for African-American adolescents: A randomized control trial. JAMA. 1998;279:1529-1536.
- * Nathanson N. Harnessing research to control AIDS. Nature Medicine. 1998;4:879-88 1.

Rothman AJ, Salovey P. Shaping perceptions to motivate healthy behavior: The role of message framing. Psychological Bulletin. 1997;121:3-19.

Hogan M, et al. Impact of music lyrics and music videos on children and youth. *Pediatrics*. 1996;98:1219-1221.

- Aguirre-Molina M, Gorman DM. Community-based approaches for the prevention of alcohol, tobacco, and other drug use. *Annual Review of Public Health*. 1996;17:337-358.

October 19: SUCCESSFUL AGING

- * Rowe JW & Kahn RL. Successful Aging. *The Gerontologist*. 1997;37:433-440.
 - * Strawbridge WJ, Cohen RD, Shema SJ & Kaplan GA. Successful Aging: Predictors and Associated Activities. *American Journal of Epidemiology*. 1996;144:135-141.
 - * Penninx B, Guralnik JM, Ferrucci L, et al. Depressive symptoms and physical decline in community-dwelling older persons. *JAMA*. 1998;279:1720-1726.
- Penninx B, Guralnik JM, Pahor M, et al. Chronically depressed mood and cancer risk in older persons. *Journal of the National Cancer Institute*. 1998;90:1888-1893.
- Inouye SK, Bogardus ST, Charpentier PA, et al., A multi-component intervention to prevent delirium in hospitalized older patients. *New England Journal of Medicine*. 1999;340:669-676.
- Schulz R, Heckhausen J. A life span model of successful aging. *American Psychologist*. 1996;51:702-714.

October 26: STRESS & HEALTH: PSYCHOLOGICAL AND PHYSIOLOGICAL EXPLANATIONS

- * Kelly S, Hertzman C, Daniels M. Searching for the biological pathways between stress and health. *Annual Review of Public Health*. 1997;18:437-462.
 - * McEwen BS. Protective and damaging effects of stress mediators. *New England Journal of Medicine*. 1998;338:171-179.
 - * Cohen S, Tyrrell DA, Smith AP. Psychological stress and susceptibility to the common cold. *New England Journal of Medicine*. 1991;325:606-612.
- Rosengren A, Orth-Gomer K, Wedel H, Wilhelmsen L. Stressful life events, social support, and mortality in men born in 1933. *British Medical Journal*. 1993;307:1102-1105.

November 2: STRESS, EMOTIONS, AND CARDIOVASCULAR DISEASE

- * Musselman DL, Evans DL, Nemeroff CB. The relationship of depression and cardiovascular disease. *Archives of General Psychiatry*. 1998;55:580-92.
 - * Mittleman MM, Maclure M, Sherwood JB, Mulry RP, et al. Triggering of acute myocardial infarction onset by episodes of anger. *Circulation*. 1995;92:1720-25.
- Herbert TB, Cohen S. Depression and Immunity: A meta-analytic review. *Psychological Bulletin*. 1993; 113:472-486.

November 30:

**INTEGRATING PSYCHOSOCIAL & BIOMEDICAL MODELS OF
HEALTH: RESEARCH, CLINICAL CARE & HEALTH POLICY**

- * Friedman R, Sobel D, Myers P, Caudill M, Benson H. Behavioral medicine, clinical health psychology, and cost offset. *Health Psychology*. 1995;14:509-518.
- * Hurowitz JC. Sounding board: Toward a social policy for health. *New England Journal of Medicine*. 1993;329:130-133.
- * Fletcher SW. Whither Scientific deliberation in health policy recommendations? *New England Journal of Medicine*. 1997;336:1180-1183.
- NIH Technology Assessment Panel. Integration of behavioral and relaxation approaches into the treatment of chronic pain and insomnia. *JAMA*. 1996;276:313-318.
- * Sorenson G, Emmons K, Hunt MK, Johnston D. Implications of the results of community intervention trials. *Annual Review of Public Health*. 1998;19:379-416.
- Woolf SH. Should we screen for prostate cancer: Men over 50 have a right to decide for themselves. *British Medical Journal*. 1997;314:989-990.
- David HP. Reproductive rights and reproductive behavior: Clash or convergence of private values and public policies? *American Psychologist*. 1994;49:343-349.
- Minkoff H, Willoughby, A. Pediatric HIV disease, Zidovudine in pregnancy, and unblinding heelstick surveys: Reframing the debate on prenatal HIV testing. *JAMA*. 1995;274-1165-1168,
- Rosenbaum JT. Lessons from litigation over silicone breast implants: A call for activism by scientists. *Science*. 1997;276:1524-1525.
- Wynder EL, Weisburger JH, Ng SK. Nutrition: The need to define "optimal" intake as a basis for public health decisions. *American Journal of Public Health*. 1992;82:346-350.
- * Mann JM. Medicine and public health, ethics and human rights. *Hastings Center Report*. 1997;27:6-13.

SEE ALSO ELECTRONIC NEWSLETTER -- "Health and Behavior Newsletter" edited by the Center for the Advancement of Health -- for more information and up-to-date resources.

For back issues: <http://www.cfah.org/alliance/main.htm>

To subscribe: e-mail <newsletter@cfah.org>; subject line should say "subscribe" (no quotes). The message should be your e-mail address.

- * Linden W, Stossel C. Psychosocial interventions for patients with coronary artery disease: A meta analysis. *Archives of Internal Medicine*. 1996; 156:745-52.
- Gullette ECD, Blumenthal JA, Babyak M, et al. Effects of mental stress on myocardial ischemia during daily life. *JAMA*. 1997;277:1521-1526.
- Burg MM, Jain D, Soufer R, Kerns RD, Zaret BL. Role of behavioral and psychological factors in mental stress induced silent left ventricular dysfunction in coronary artery disease. *Journal of the American College of Cardiology*. 1993;22:440-448.
- Berkman LF, Leo-Sumner L, Horwitz RI. Emotional support and survival after myocardial infarction. *Annals of Internal Medicine*. 1992-117:1003-9
- Friedman M, Thoresen CE, Gill JJ, Ulmer D, Powell LH, Price VA, Brown B, Thompson L, Rabin DD, Breall WS, Bourg E, Levy R, Dixon T. Alteration of Type A behavior and its effects on cardiac recurrences in post myocardial infarction patients. *American Heart Journal*. 1986;112:653-65.

November 9: METHODS FOR SOCIAL & BEHAVIORAL SCIENCE RESEARCH

- * Grady KE & Wallston BS. Research in Health Care Settings. 1988. Chapters 3-5 (pp. 36-83).

**November 16: PSYCHOSOCIAL INFLUENCES ON HEALTH:
DETERMINANTS & CONSEQUENCES**

- Cohen S, Herbert TB. Health psychology: Psychological factors and physical disease from the perspective of human psychoneuroimmunology. Annual Review of Psychology. 1996;47:113-142.
- * Goldman SL, Kraemer DT, Salovey P. Beliefs about mood moderate the relationship of stress to illness and symptom reporting. Journal of Psychosomatic Research. 1996;41:115-128.
- Frasure-Smith N, Lesperance F, Talajic M. Depression and 18-month prognosis after myocardial infarction. Circulation. 1995;91:999-1005.
- * House JS, Landis KR, Umberson D. Social relationships and health. Science. 1988;241:540-544.
 - * Spiegel D, Bloom JR, Kraemer HC, Gottheil E. Effect of psychosocial treatment on survival of patients with metastatic breast cancer. Lancet. 1989;2:888-89 1.
- Myers GP, McGrady GA, Marrow C, Mueller CW. Weapon carrying among black adolescents: A social network perspective. American Journal of Public Health. 1997;87:1038-1040.

For further information (not included in packet), see also:

Uchino BN, Cacioppo JT, Kiecolt-Glaser J. The relationship between social support and Physiological processes: A review with emphasis on underlying mechanisms and implications for health. Psychological Bulletin. 1996;119:488-531.