SOC 598 – Social Network Methods in Health Research (Graduate Seminar)

Social Sciences Building, Room 314 Spring 2012 T 4.40-7.30pm

http://www.public.asu.edu/~jadams27/courses/598/

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or by appointment

Course Summary

This research seminar examines the primary strategies for designing social network data collection in health-focused research. We will draw on published research to serve as exemplars of the varied social science data collection strategies in general (e.g., surveys, interviews, experiments and participant observation) and the range of network-specific approaches (i.e., local/ego, partial and complete network designs). We will read several research papers/findings from a single research design. We will use the contrast across the various questions for which each research design was subsequently used to focus our discussion to identify how the strategies the research team selected shaped the findings that stem from that research. This will allow us to examine the variety of social network design strategies that are available and to evaluate the implications of those decisions as they impact the content of published research.

Your primary aim in this class will be to apply the concepts and examples that we experience to construct a research proposal employing these methods. Your proposal will be modeled on the format of a National Science Foundation Dissertation Improvement Grant Proposal.

The design of the course assumes a basic working knowledge of social scientific research methods and some exposure to the ideas behind Social Network Analysis. While neither is explicitly required, each is strongly encouraged. As warranted for those finding them necessary, there are pointers in the syllabus to "refresher" materials for these background ideas where it may be helpful.

Required Reading

All required reading for this course is listed on the course calendar and either (a) is readily available from online sources (e.g., JSTOR, EBSCO, etc.) or (b) will be posted to Blackboard as noted **(BB)**.

Course Elements

Participation (25%)

This is a seminar, so all students are expected to participate fully in in-class discussions. In addition to the substantive focus of this course, a secondary aim (like all graduate courses) is to achieve some level of sociological professionalization. Part of your job as a sociologist will require you to speak to audiences (whether presenting at conferences, giving presentations at other departments or teaching your own classes). It is much better to start now with people you know than to wait till later when the stakes will be higher. As such, in-class participation is a *required* component of this class.

1. To facilitate your in-class participation, you are required to email a weekly discussion question (by 5pm the day before class). The aim of these questions should be to highlight aspects of the design that particularly influenced the findings/conclusions of the presented research, the implications of which will be discussed in class. These will be used to prompt in-class discussions of the strengths/weaknesses of those decisions and suggestions for design alternatives to address those concerns. These can be general (e.g., using a survey instead of interviews) or specific (e.g., addressing variable operationalization, etc.). (5%)

- 2. The second participation requirement entails leading class discussion for (at least) one class period. Your introduction should last ~20 minutes and will serve two primary purposes. First, you should describe the basic approach taken by the research team to gather data, focusing on the network aspects of their research strategy. Second, you should introduce our discussion by raising some key questions regarding the ways that research design elements shaped the findings/conclusions in the assigned readings. The second aim is not intended to be comprehensive, but to start the day's discussion. An outline of the questions you would like to address should be posted to Blackboard *no later than 5pm on the Sunday* before our class meeting. You have the option of collaborating with another student for this assignment. The schedule is on BB. (10%)
- 3. The next to last class of the semester will be a "Mock Review Panel" where you will be assigned to review your classmates' research proposals. As part of this review, you will be required to submit a written evaluation *and* orally present a summary of your evaluation of the proposal. Further details for this review will be made available later in the semester. (10%)

Reading Responses (40%, 10% each)

For **four** class-periods during the semester, you will turn in a summary and critique of the week's assigned readings. Your summary will be approximately 5 pages in length. The first two pages should briefly describe how the network aspects of the research project for the week were designed. The latter 2-3 pages should then critically evaluate how *at least two* of the assigned readings' findings were shaped by those research design strategies. These are not summaries of the entire paper, but a focused discussion of the network-based research design elements represented in these studies. Your critical analysis can address a number of factors, including (but not limited to):

- How readily the design elements align with the aims of the research question(s) being addressed.
- Other research design strategies that would have improved the fit between the aims of the analysis and the available data.
- Why the data used are particularly well suited to the analyses being conducted.
- How the available data could be used to address extension questions raised by the presented analyses, or modifications to the research design that would be necessary for such extensions.
- Sample (or sub-sample) biases in the patterns described.

For this requirement, you must write a summary/critique for *at least one project representing each of the primary research design strategies* (i.e., local/ego, partial, complete). You cannot turn in more than one summary/critique in any single week.

Research Proposal (35%)

The final product for this course will be a draft of a research proposal in the style of an NSF Dissertation Improvement Grant Proposal. Your proposal must include a significant portion drawing on at least one network design element we have discussed, and the subject of your proposal must somehow address a health-related issue (broadly defined). Beyond those two requirements, the substance of your proposal should address a research question of interest to you. For complete requirements, see http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpgprint.pdf. While the entire document will be helpful, in particular, see sections II-B for formatting requirements. Your proposals will be no longer than 16 pages (1 page summary, see II-C-2-b for what this should include; and 15 pages for the project description, see II-C-2-d for what this should include). Substantively, you must cover *at least* aims 1, 2 and 4 (see I-D-3).

Your proposal will be due in stages. The "Letter of Intent" (See I-D-1) will briefly outline the topic you plan to address and rough-sketch the details of your research plan. This will be due in class on **February**

14th. You will turn in a complete draft of your proposal for the Mock Review Session in class on **April** 10th. The final version of your proposal will be due no later than 4pm on **April** 30th.

A Note about Grading – If you haven't figured it out by now – grades in grad school should not matter. If you do well on all of the components described above, you will get an A in the course. If you do not contribute to in-class discussion, or write a poor proposal, you will not get an A. I do NOT discuss individual student's grades in class or over email; they should be reserved for office hours. All assignments will be evaluated by letter grades (or equivalents, e.g., 4=A, 3=B, etc.). A grades will be assigned to work that is reflective of prevalent professional standards in sociology. B grades will reflect work that represents sufficient graduate-level work, but would require substantial improvement to achieve professional standards. C grades will reflect work that minimally addresses assignment criteria. D and E grades will reflect work that does not fulfill the stated criteria.

Requirements & Policies

Attendance – This is a seminar. You are expected to attend each class session, having completed ALL assigned readings and contribute to the discussion. You should plan to show up on time and not leave early from class sessions; if you must, do so discretely.

Written Assignments – ALL written assignments must be typed, double-spaced and have:

✓ Cover-page (name nowhere else)

✓ Times New Roman font

✓ Stapled

✓ One-inch margins on all sides

✓ 12-point font

✓ Proper ASA citations

Contacting the Instructor - The best way to reach me is email – <u>jimi.adams@asu.edu</u>. Typically, I will respond within 2 working days. Additionally, you are highly encouraged to make use of office hours to address any questions you have about the class.

Course Blackboard – Blackboard will be used for online communication in this course. You should use this service to your advantage. You can find a copy of the syllabus and all assignments there. I strongly encourage you to make visits to this resource a regular part of your preparation for this course.

Late Work – Under *NO* circumstances will late work be accepted. Because there are numerous opportunities to meet most requirements, they are all due *at the beginning of class on the day* the corresponding reading is assigned.

Academic Integrity – Any student caught plagiarizing any written assignments (from published sources or another student) will receive a zero for that portion of their grade, and the assignment will not be eligible for make-up. Students caught cheating more than once will receive an E for the course, and I will write a letter to the Dean regarding the student's dishonest behavior to be placed in the student's academic record.

Writing – The majority of a practicing sociologist's job is spent writing. One of your primary aims in graduate school should therefore be to develop your writing skills. As such, all written work should be edited and carefully proof-read. If necessary, please make use of University writing services and/or writing style guides. Some examples worth having on your shelf are:

- Becker, Howard S. 1983. Writing for Social Scientists: How to Start and Finish Your Thesis, Book or Article. University of Chicago Press
- Strunk & White. 2000. The Elements of Style. Allyn & Bacon
- Thomas & Turner. 1994. Clear and Simple as the Truth: Writing Classic Prose. Princeton University Press
- Zinsser, William. 1990. On Writing Well: An Informal Guide to Writing Nonfiction. Harper

Students with Disabilities

Accommodations will be made for students with documented disabilities. Please let me know your arrangements with the Disability Resource Center (DRC) *as soon as possible*.

Background Reading

There is no assigned textbook for this class. In addition to the supplemental readings recommended on Day 1 of the syllabus, you may find the following (more detailed) treatments helpful.

- Luker, Kristin. 2008. Salsa Dancing into the Social Sciences: Research in an Age of Info-Glut. Harvard University Press.
- Scott, John P. & Peter J. Carrington. 2011. The SAGE Handbook of Social Network Analysis. Sage.
- Singleton, Royce A. & Bruce C. Straits. 2009. *Approaches to Social Research*. 5th Edition. Oxford University Press.
- Valente, Thomas W. 2010. Social Networks and Health: Models, Methods and Applications. Oxford University Press.
- Wasserman, Stanley & Katherine Faust. 1994. *Social Network Analysis: Methods and Applications*. Cambridge.

Tentative Course Schedule

Please note, this schedule is subject to change – all changes will be announced in class.

A Note on Reading – Occasionally in this class, the assigned readings will constitute more than you can reasonably complete in the time allotted. As you continue in your career, you will find that this is often the case. Again, this course is not meant to comprehensively cover any of the following topics, but to begin the process. As such, you should develop a strategy for extracting the key elements of each reading as it pertains to the aims this class.

1 - January 10th – Introduction

Required Readings:

- Emirbayer Mustafa. 1997. "Manifesto for a Relational Sociology." *American Journal of Sociology* 103:281-317
- Morris, Martina. 2004. "Editor's Introduction" & "Overview of Network Survey Designs." Pp. 1-21 in Network Epidemiology: A Handbook for Survey Design and Data Collection. Oxford University Press. (BB)
- Marsden, Peter V. 2011. "Survey Methods for Network Data." Chapter 25 in John Scott and Peter J. Carrington (Eds.). *The Sage Handbook of Social Network Analysis.* Sage **(BB)**

Recommended Background/Additional Readings:

If you have limited previous exposure to social networks, it will likely be *very* useful for this semester for you to grab one of the (many) brief overview books that are available. The options I recommend are listed below. If you find another that you would like to consider, feel free to ask me about it to ensure it would be appropriate.

- Scott, John. 2000. Social Network Analysis: A Handbook. Sage.
- Degenne, Alain & Michel Forse. 1999. Introducing Social Networks. Sage.
- Knoke David & Song Yang. 2007. *Social Network Analysis* Volume 2. (Quantitative Applications in the Social Sciences Series #154). Sage.

2- January 17th – The General Social Survey "Important Matter" Networks

- Marsden, Peter V. 1987. "Core Discussion Networks of Americans." *American Sociological Review* 52:122-31.
- Moore, Gwen. 1990. "Structural Determinants of Men's and Women's Personal Networks." American Sociological Review 55:726-35.
- McPherson, J. Miller, Lynn Smith-Lovin, and Matthew E. Brashears. 2006. "Social Isolation in America: Changes in Core Discussion Networks over Two Decades." *American Sociological Review*. 71: 353-375.
- Fischer, Claude S. 2009. "The 2004 GSS Finding of Shrunken Social Networks: An Artifact?" American Sociological Review 74:657-669.
- McPherson, Miller, Lynn Smith-Lovin, and Matthew Brashears. 2009. "Models and Marginals: Using Survey Evidence to Study Social Networks." *American Sociological Review* 74:670-681.
- Bearman, Peter, and Paolo Parigi. 2004. "Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure." *Social Forces* 83:535-557.

- Fischer, Claude S. 1982. To Dwell among Friends: Personal Networks in Town and City. University of Chicago Press.
- Smith, Tom W., and Kaddin Heaney. 1995. "Who, What, When, Where, and Why: An Analysis of Usage of the General Social Survey, 1972-1993." National Opinion Research Center. University of Chicago.

3- January 24th - The National Longitudinal Study of Adolescent Health - Social Networks

Required Readings:

- Add Health. 2011. "Design Slide Show." University of North Carolina. Downloaded from "http://www.cpc.unc.edu/projects/addhealth/design/slideshow/view". Accessed on 04 October, 2011.
- Bearman, Peter S. and James Moody. 2004. "Suicide and Friendships among American Adolescents." *American Journal of Public Health* 94(1):89-95.
- Feigelman, William, and Bernard S. Gorman. 2008. "Assessing the Effects of Peer Suicide on Youth Suicide." *Suicide and Life-Threatening Behavior* 38:181-194.
- Haas, Steven A., David R. Schaefer, and Olga Kornienko. 2010. "Health and the Structure of Adolescent Social Networks." *Journal of Health and Social Behavior* 51:424-439.
- Schaefer, David R., Olga Kornienko and Andrew M. Fox. 2011. "Misery Does not Love Company: Network Selection Mechanisms and Depression Homophily." *American Sociological Review* 76:764-85.

Recommended Background/Additional Readings:

- Bearman, Peter S., Jo Jones and J. Richard Udry. 1997. "The National Longitudinal Study of Adolescent Health: Research Design." University of North Carolina-Chapel Hill.
- Boonstra, Heather. 2001. "The 'Add Health' Survey: Origins, Purposes and Design." *Guttmacher Report on Public Policy* 4(3): 10-12
- Coleman, James S. 1961. The Adolescent Society. New York: Free Press.
- Greenstein, Theodore N. 2006. "The Ethics and Politics of Family Research." Chapter 14 in *Methods of Family Research*. Sage.

4- January 31st – The Search for an Abortionist

- Lee, Nancy Howell. 1969. The Search for an Abortionist: A Study of 114 Women Who Underwent Abortions—Their Reasons, Their Reactions, and the Ways in which they Found this "Invisible" Service. University of Chicago Press.

Recommended Background/Additional Readings:

- Moreno, Jacob L. 1953. Who Shall Survive? New York: Beacon Press.
- Bott, Elizabeth. 1957. Family and Social Network. London: Tavistock.

5- February 7th – Urban Life among Youth in Kisumu Project

Required Readings:

- Luke, Nancy, Shelley Clark, and Eliya Zulu. 2011. "The Relationship History Calendar: Improving the Scope and Quality of Data on Youth Sexual Behavior." *Demography* 48: 1151-1176.
- Clark, Shelley, Caroline Kabiru, and Eliya Zulu. 2011. "Do Men and Women Report Their Sexual Partnerships Differently?: Evidence From Kisumu, Kenya." *International Perspectives on Sexual and Reproductive Health,* forthcoming. **(BB)**
- Clark, Shelley, Caroline Kabiru, and Rohini Mathur. 2010. "Relationship Transitions Among Youth in Urban Kenya." *Journal of Marriage and Family* 72: 73-88.
- Xu, Hongwei, Nancy Luke, and Eliya Msiyaphazi Zulu. 2010. "Concurrent Sexual Partnerships among Youth in Urban Kenya: Prevalence and Partnership Effects." *Population Studies* 64(3):247-261
- Kabiru, Caroline W, Nancy Luke, Chimaraoke O Izugbara, and Eliya M Zulu. 2010. "The correlates of HIV testing and impacts on sexual behavior: evidence from a life history study of young people in Kisumu, Kenya". *BMC Public Health* 10(1):412

Recommended Background/Additional Readings:

- "Relationship History Calendar Questionnaire." http://www.mcgill.ca/files/lifehistoriesandhealth/rhc_questionnaire.pdf
- "Sexual Partnership Questionnaire." http://www.mcgill.ca/files/lifehistoriesandhealth/spq_questionnaire.pdf
- Freedman D, Arland T, Camburn D, Alwin D, Young-DeMarco L. 1988. "The life history calendar: a technique for collecting retrospective data." *Sociological Methodology* 18:37-68
- Glynn JR, Caraël M, Auvert B, Kahindo M, Chege J, Musonda R, Kaona F, Buve A: Why do young women have a much higher prevalence of HIV than young men? A study in Kisumu, Kenya and Ndola, Zambia. *AIDS* 2001, 15(Suppl 4):S51-S60.

6- February 14nd – The Framingham Heart Study

- N.A. Christakis and J.H. Fowler. 2007. "The Spread of Obesity in a Large Social Network Over 32 Years." *New England Journal of* Medicine 357(4): 370-379
- N.A. Christakis and J.H. Fowler 2008. "The Collective Dynamics of Smoking in a Large Social Network." *New England Journal of Medicine* 358(21): 2249-2258
- J.H. Fowler and N.A. Christakis. 2008. "The Dynamic Spread of Happiness in a Large Social Network: Longitudinal Analysis Over 20 Years in the Framingham Heart Study." *British Medical Journal* 337: a2338
- J.N. Rosenquist, J. Murabito, J.H. Fowler, and N.A. Christakis. 2010. "The Spread of Alcohol Consumption Behavior in a Large Social Network," *Annals of Internal Medicine* 152(7): 426-433

- J.T. Cacioppo, J.H. Fowler, and N.A. Christakis. 2009. "Alone in the Crowd: The Structure and Spread of Loneliness in a Large Social Network," *Journal of Personality and Social Psychology* 97(6): 977-991
- Lyons, Russell. 2011. "The Spread of Evidence-Poor Medicine via Flawed Social-Network Analysis." *Statistics, Politics and Policy* 2(1): Article 1.

- Cohen-Cole, Ethan, and Jason M. Fletcher. 2008. "Is obesity contagious? Social networks vs. environmental factors in the obesity epidemic." *Journal of Health Economics* 27:1382-1387.
- Cohen-Cole, Ethan, and Jason M. Fletcher. 2008. "Detecting Implausible Social Network Effects in Acne, Height and Headaches: Longitudinal Analysis." *BMJ* 337:a2533.
- J.H. Fowler and N.A. Christakis. 2008. "Estimating Peer Effects on Health in Social Networks," *Journal of Health Economics* 27(5): 1386-1391
- Noel, Hans, and Brendan Nyhan. "The 'Unfriending' Problem: The consequences of homophily in friendship retention for causal estimates of social influence." *Social Networks* 33:211-218.

7- February 21st – Colorado Springs "Project 90"

Required Readings:

- Potterat, J. J., D. E. Woodhouse, S. Q. Muth, R. B. Rothenberg, W. W. Darrow, A. S. Klovdahl, and J. B. Muth. 2004. "Network dynamism: history and lessons of the Colorado Springs study." Chapter 4 in Martina Morris (Ed.) *Network Epidemiology: A Handbook for Survey Design and Data Collection.* Oxford: Oxford University Press. **(BB)**
- Rothenberg, R. B., J. J. Potterat, D. E. Woodhouse, S. Q. Muth, W. W. Darrow, and A. Klovdahl. 1998. "Social Network dynamics and HIV transmission." *AIDS* 12:1529-1536.
- Potterat, J. J., L. Phillips-Plummer, S. Q. Muth, R. B. Rothenberg, D. E. Woodhouse, T. S. Maldonado-long, H. P. Zimmerman, and J. B. Muth. 2002. "Risk network structure in the early epidemic phase of HIV transmission in Colorado Springs." *Sexual Transmission Infections* 78:i159-i163.
- Potterat, John J., Richard B. Rothenberg, H. Zimmerman-Rogers, D. L. Green, J. E. Taylor, M. S. Bonney, and H. A. White. 2002. "Sexual Network structure as an indicator of epidemic phase." *Sexually Transmitted Infections* 78:i152-i158.
- adams, jimi, James Moody & Martina Morris. 2011. "The Relative Contribution of Sex and Drug Ties to STI-Relevant Network Connectivity." Manuscript, Arizona State University. **(BB)**

Recommended Background/Additional Readings:

- Darrow, W. W., J. J. Potterat, R. B. Rothenberg, D. E. Woodhouse, S. Q. Muth, and A. S. Klovdahl. 1999. "Using knowledge of social networks to prevent human immunodeficiency virus infections: the Colorado Springs study." *Sociological Focus* 32:143-158.
- Woodhouse, D. E., R. B. Rothenberg, J. Potterat John, W. W. Darrow, S. Q. Muth, A. S. Klovdahl, H. P. Zimmerman, H. L. Rogers, T. S. Maldonado, J. B. Muth, and J. U. Reynolds. 1994. "Mapping a social network of heterosexuals at high risk of human immunodeficiency virus infection." *AIDS* 8:1331-1336.
- adams, jimi, James Moody, Stephen Q. Muth & Martina Morris. 2012. "Quantifying the Benefits of Link-Tracing Designs for Partnership Network Studies." *Field Methods*, forthcoming
- adams, jimi & James Moody. 2007. "To Tell the Truth? Measuring Concordance in Multiply-Reported Social Network Data." *Social Networks* 29(1): 44-58.

Required Readings:

- Investigators, Writing Committee for the ENRICHD. 2003. "Effects of Treating Depression and Low Perceived Social Support on Clinical Events After Myocardial Infarction." *JAMA* 289:3106-3116.
- Lett, Heather S., James A. Blumenthal, Michael A. Babyak, Diane J. Catellier, Robert M. Carney, Lisa F. Berkman, Matthew M. Burg, Pamela Mitchell, Allan S. Jaffe, and Neil Schneiderman. 2007. "Social support and prognosis in patients at increased psychosocial risk recovering from myocardial infarction." Health Psychology 26:418-418-427.
- Jaffe, Allan S., Harlan M. Krumholz, Diane J. Catellier, Kenneth E. Freedland, Vera Bittner, James A. Blumenthal, James E. Calvin, James Norman, Rafael Sequeira, Christopher O'Connor, Michael W. Rich, David Sheps, and Colin Wu. 2006. "Prediction of medical morbidity and mortality after acute myocardial infarction in patients at increased psychosocial risk in the Enhancing Recovery in Coronary Heart Disease Patients (ENRICHD) study." American Heart Journal 152:126-135.
- Burg, Matthew M., John Barefoot, Lisa Berkman, Diane J. Catellier, Susan Czajkowski, Patrice Saab, Marc Huber, Vicki DeLillo, Pamela Mitchell, Judy Skala, C. Barr Taylor, and for the ENRICHD Investigators. 2005. "Low Perceived Social Support and Post–Myocardial Infarction Prognosis in the Enhancing Recovery in Coronary Heart Disease Clinical Trial: The Effects of Treatment." *Psychosomatic Medicine* 67:879-888.

Recommended Background/Additional Readings:

- Ertel, Karen A., M. Maria Glymour, and Lisa F. Berkman. 2009. "Social networks and health: A life course perspective integrating observational and experimental evidence." *Journal of Social and Personal Relationships* 26:73-92.
- Berkman, Lisa F., Linda Leo-Summers, and Ralph I. Horwitz. 1992. "Emotional Support and Survival after Myocardial Infarction." *Annals of Internal Medicine* 117:1003-1009.

9 - March 6th - Peer Interventions and Teen Smoking Behavior

Required Readings:

- Unger, Jennifer B., Chih-Ping Chou, Paula H Palmer, Anamara Ritt-Olson, Peggy Gallaher,
 Steven Cen, Kara Lichtman, Stanley Azen, and C. Anderson Johnson. 2004. "Project FLAVOR:
 1-Year Outcomes of a Multicultural, School-Based Smoking Prevention Curriculum for
 Adolescents." American Journal of Public Health 94:263-265.
- Valente, Thomas W., Beth R. Hoffman, Annamara Ritt-Olson, Kara Lichtman, and C. Anderson Johnson. 2003. "Effects of a Social-Network Method for Group Assignment Strategies on Peer-Led Tobacco Prevention Programs in Schools." American Journal of Public Health 93:1837-1843
- Valente, Thomas W., Jennifer B. Unger, and C. Anderson Johnson. 2005. "Do popular students smoke? The association between popularity and smoking among middle school students." *Journal of Adolescent Health* 37:323-329.
- Valente, Thomas W., Anamara Ritt-Olson, Alan Stacy, Jennifer B. Unger, Janet Okamoto, and Steve Sussman. 2007. "Peer acceleration: effects of a social network tailored substance abuse prevention program among high-risk adolescents." *Addiction* 102:1804-1815.

Recommended Background/Additional Readings:

- Gottfredson B. D. 1987. Peer group interventions to reduce the risk of delinquent behavior: a selective review and a new evaluation. *Criminology* 25: 671–714
- Killeya-Jones, Ley, Ryo Nakajima, and Philip Costanzo. 2007. "Peer Standing and Substance Use in Early-Adolescent Grade-Level Networks: A Short-Term Longitudinal Study." *Prevention Science* 8:11-23.

- Valente T. W. 1995. Network Models of the Diffusion of Innovations. Cresskill, NJ: Hampton Press.
- Valente T. W., Okamoto J., Pumpuang P., Sussman S. 2007. "Differences in perceived implementation of a standard versus a peer-led interactive substance-abuse prevention program." American Journal of Health Behavior 31: 297–311
- Valente, Thomas W., and Patchareeya Pumpuang. 2007. "Identifying Opinion Leaders to Promote Behavior Change." *Health Education & Behavior* 34:881-896.
- Valente, Thomas W., and Rebecca L. Davis. 1999. "Accelerating the Diffusion of Innovations Using Opinion Leaders." The Annals of the American Academy of the Political and Social Sciences 566:55-67

10- March 13th – Tetracycline Prescription Diffusion

Required Readings:

- Coleman, James S., Elihu Katz, and Herbert Menzel. 1957. "The diffusion of an innovation among physicians." *Sociometry* 20:253-270.
- Burt, Ronald S. 1987. "Social Contagion and Innovation: Cohesion versus Structural Equivalence." *American Journal of Sociology* 92:1287-1335.
- Strang, David, and Nancy Brandon Tuma. 1993. "Spatial and Temporal Heterogeneity in Diffusion." *American Journal of Sociology* 99:614-639.
- Van den Bulte, Cristophe, and Gary L. Lilien. 2001. "Medical innovation revisited: Social contagion versus marketing effort." *American Journal of Sociology* 106:1409-1435.
- Kilduff, Martin, and Hongseok Oh. 2006. "Deconstructing diffusion An ethnostatistical examination of medical innovation network data reanalyses." Organizational Research Methods 9:432-455.

Recommended Background/Additional Readings:

- Aral, Sinan, Lev Muchnik, and Arun Sundararajan. 2009. "Distinguishing Influence-based Contagion from Homophily-driven Diffusion in Dynamic Networks." *Proceedings of the National Academy of Science* 106:21544-21549.
- Rogers, Everett M. 1995. Diffusion of Innovations, 4th Edition. New York: The Free Press.
- Valente, Thomas W. 1995. *Network Models of the Diffusion of Innovations*. Cresskill, NJ: Hampton Press.
- Wejnert, Barbara. 2002. "Integrating Models of Diffusion of Innovations: A conceptual Framework." *Annual Review of Sociology* 28:297-326.

11- March 27th - National Social Life, Health, and Aging Project

- Cornwell, Benjamin, L. Philip Schumm, Edward O. Laumann, and Jessica Graber. 2009. "Social Networks in the NSHAP Study: Rationale, Measurement, and Preliminary Findings." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 64B:i47-i55.
- Cornwell, Benjamin, Edward O. Laumann, and L. Philip Schumm. 2008. "The Social Connectedness of Older Adults: A National Profile." *American Sociological Review* 73:185-203.
- Cornwell, Erin York, and Linda J. Waite. 2009. "Social Disconnectedness, Perceived Isolation, and Health among Older Adults." *Journal of Health and Social Behavior* 50(1):31-48.
- Linda Waite and Aniruddha Das. 2010. "Families, Social Life, and Well-Being at Older Ages." Demography 47(S) S87-S109.
- Cornwell, Benjamin. 2009. "Network Bridging Potential in Later Life." *Journal of Aging and Health* 21:129-154.
- Cornwell, Benjamin, and Edward O. Laumann. "Network Position and Sexual Dysfunction: Implications of Partner Betweenness for Men." *American Journal of Sociology* 117:172-208.

- Suzman, Richard. 2009. "The National Social Life, Health, and Aging Project: An Introduction." The Journals of Gerontology Series B: Psychological Sciences and Social Sciences 64B:i5-i11.
- Umberson, Debra, Robert Crosnoe, and Corinne Reczek. 2010. "Social Relationships and Health Behavior across the Life Course." *Annual Review of Sociology* 36:139–57.

12- April 3rd - Add Health - Sexual/Romantic Networks

Required Readings:

- Bearman, P.S.; Moody, J.; Stovel, K.; & Thalji, L. (2004). "Social and sexual networks: The national longitudinal study of adolescent health." In Morris, Martina (Ed.), *Network Epidemiology: A Handbook for Survey Design and Data Collection* (pp. 201-237). New York: Oxford University Press. **(BB)**
- Bearman, P. S., J. Moody, and K. Stovel. 2004. "Chains of affection: The structure of adolescent romantic and sexual networks." *American Journal of Sociology* 110:44-91.
- Moody, James. 2002. "The importance of relationship timing for diffusion." Social Forces 81:25-56
- Ford, K.; & Lepkowski, J. 2004. "Characteristics of Sexual Partners and STD Infection Among American Adolescents." *International Journal of STD and AIDS*, 15, 260-265.
- Morris, Martina, Ann E. Kurth, Deven T. Hamilton, James Moody, and Steve Wakefield. 2009.
 "Concurrent Partnerships and HIV Prevalence Disparities by Race: Linking Science and Public Health Practice." *American Journal of Public Health* 99:1023-1031.

Recommended Background/Additional Readings:

- Hallfors DD, Iritani BJ. Miller WC, Bauer DJ. 2007. "Sexual and drug behavior patterns and HIV and STD racial disparities: the need for new directions." *American Journal of Public Health* 97:125-132
- Laumann E, Gagnon J, Michael R. Michaels S. 1994. *The Social Organization of Sexuality*. University of Chicago Press
- Laumann E. Youm Y. 1999. "Racial/ethnic group differences in the prevalence of sexually transmitted diseases in the United States: a network explanation." *Sexually Transmitted Diseases* 26:250-261
- Klovdahl, A. S. 1985. "Social Networks and the Spread of Infectious Diseases: The AIDS Example." *Social Science Medicine* 21:1203-16.
- Morris M. Kretzschmar M. 1995. "Concurrent partnerships and transmission dynamics in networks." Social Networks 17:299-318

13- April 10th – Malawi Diffusion and Ideational Change Project

- Kohler, Hans-Peter, Jere R. Behrman, and Susan Cotts Watkins. 2007. "Social Networks and HIV/AIDS Risk Perceptions." *Demography* 44(1):1-33.
- Bignami-Van Assche, Simona. 2005. "Network stability in longitudinal data: A case-study from rural Malawi." *Social Networks* 27(3): 231-247.
- Anglewicz, Philip, Simona Bignami-Van Assche, Shelley Clark, and James Mkandawire. "HIV Risk Among Currently Married Couples in Rural Malawi: What Do Spouses Know About Each Other?" *AIDS and Behavior* 14:103-112.
- Boileau, C., Shelly Clark, Simona Bignami-Van Assche, Michelle Poulin, Georges Reniers, Susan C. Watkins, Hans-Peter Kohler, and S. J. Heyman. 2009. "Sexual and Marital Trajectories and HIV Infection among Ever-Married Women in Rural Malawi." *Sexually Transmitted Infections* 85:i27-i33.

- Clark, Shelley. 2010. "Extra-marital sexual partnerships and male friendships in rural Malawi." Demographic Research 22:1-28.
- Zulu, Eliya M., and Gloria Chepngeno. 2003. "Spousal Communication About the Risk of Contracting HIV/AIDS in Rural Malawi." *Demographic Research* S1:247-278.

- Philip Anglewicz, jimi adams, Francis Obare, Hans-Peter Kohler, and Susan Watkins. 2009. "The Malawi Diffusion and Ideational Change Project 2004–06: Data collection, data quality, and analysis of attrition" *Demographic Research* 20(21): 503-540
- Bignami-Van Assche, Simona, Georges Reniers, Alexander A. Weinreb. 2003. "An Assessment of the KDICP and MDICP Data Quality." *Demographic Research* S1(2): 31-76.

14- April 17th – Mock Review Panel

Required Readings:

- Assigned Proposal Drafts (to be distributed on BB).
- NSF. 2009. "Proposal Processing and Review." (focus on Chapter III, Section A). http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpgprint.pdf
- NIH. 2010. "Review Criteria at a Glance." http://grants.nih.gov/grants/peer/guidelines_general/Review Criteria at a glance.pdf
- NIH. 2010. "Scoring System and Procedure." http://grants.nih.gov/grants/peer/guidelines_general/scoring_system_and_procedure.pdf

Recommended Background/Additional Readings:

- NIH. 2010. "CSR Critique Examples." http://cms.csr.nih.gov/NR/rdonlyres/D8F7989B-2F4F-4C72-8DC0-712EC94EF119/24625/CSRCritqueExamples080411.pdf
- http://www.voutube.com/watch?v=fBDxI6l4dO

15- April 24th – Ethics in Network Research

Required Readings:

- Breiger, Ronald L. (Ed.) 2005. *Social Networks* "Special Issue on Ethical Dilemmas in Social Network Research." 27(2) **[5 articles]**