

HPM/HBEH 765, EPID 772
Cancer Prevention and Control Seminar – Spring 2018
Class Location: 1305 McGavran-Greenberg

Meeting Times: Tuesdays/Thursdays: 9:30 – 10:45 PM

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Objectives

This seminar is an introduction to the science and practice of cancer prevention and control. The course emphasizes current controversies and events, with a focus on the interdisciplinary nature of the field. Because cancer prevention and control encompasses a multitude of topics, the course is not comprehensive. Instead, our objective will be to gain content expertise in selected topics. We will also seek to develop our ability to critique journal articles, engage in scientific discussion and debate, and learn about cancer-related topics through one-on-one interviews.

Assignments and Grading - Summary

This course is a seminar. We assume participants to constitute a “community of learners” with each individual bringing valuable professional perspectives and experiences to the group. Public health research and practice are inherently social endeavors. Thus, we will read journal articles not as facts on a page, but instead as socially-constructed arguments to be critically evaluated. Most sessions will feature short student presentations and class discussions, which will focus on the assigned readings. In addition, several experts in cancer prevention and control will be guest speakers.

The course has three graded assignments.

1. Seminar Presentations and Participation (40%)

The purpose of the seminar presentations is to gain knowledge and to stimulate discussion of issues in cancer prevention and control. For most seminar sessions, selected readings are assigned to everyone to read and other articles are assigned to each group. A representative from each group will present and critique the group’s assigned article. Over the course of the semester, students are expected to make an equal (or a nearly equal) number of seminar presentations. Students are also expected to contribute to each class discussion.

2. Debates (30%)

Each student will participate in one of two in-class debates as part of a team. The topic for each debate will be a current controversy in cancer prevention and control that the NC Advisory Committee on Cancer Coordination and Control must confront. Each group will constitute a team of experts representing the 'pro' or 'con' side of the issue. Groups will try to convince the Committee to adopt their position on the issue.

3. Informational interviews (30%)

Each student will conduct an informational interview to explore a cancer-related topic of his or her choice. The assignment will include the development of an interview guide (10%) and a brief (~3 page) report, summarizing and reflecting on themes from the interview (20%).

Assignments and Grading – Detail

Readings and Presentations

Each group will be assigned readings for which they are responsible. Please read the readings assigned to your group for the day, as well as those marked “everyone.” We recommend you also review the abstracts of papers assigned to other groups.

A representative from each group will take **7 minutes** to present the main ideas and offer a brief review of the paper's/study's strength and weaknesses. Each group will decide who should make the presentation on a given date, with each member presenting about the same number of times during the semester. It's up to the group to determine the extent to which you will collaborate or work independently to prepare. Some groups may choose to meet outside of class, while others may prefer to share notes a day or two before class for feedback. Your group will find the model that suits your styles and schedules. You do not need PowerPoint slides for your presentations. If you use visuals, please keep them simple and limited to handouts.

Following all the presentations, the class as a whole will discuss the general themes of the articles, and address questions, comments, etc. To conclude each day's discussion, the class will collectively generate a bullet point summary of the day's main points. The teaching team will edit and compile these summaries in a class document for you to have for the future.

- Grading will be for the individual, not for the group as a whole. The grade will be based 80% on quality of content (how well you described and critiqued the article) and 20% on quality of presentation (clarity, organization, style).

We will use Michael O'Malley's Seminar Presentation Guidelines:

#1 Relax.

#2 **Do the impossible.** Briefly tell us what we should know about the article. You will have 7 minutes to present. Focus on the most important issues, including:

- **Basic Facts.** Who did the study, when, where? What kind of a study was it -- case/control, randomized controlled trial, etc? How big was it? Who paid for it?
- **Purpose.** What is/are the main point(s) of the study? What is the main hypothesis?
- **Results.** What are the most important findings?
- **Good, Bad, Ugly.** What are the study's major strengths and weaknesses?
- **Punch Line.** Given the above, what is the study's conclusion and do you buy it?
- **Why Should We Care?** What is the study's relevance for cancer prevention and control? Or, why did we have you read this?
- **What else?** Please conclude with a good discussion question.

Most articles will lend themselves to the above outline, but a few will more closely resemble review or data summary articles. Do your best. And, whenever possible, resist the temptation to conclude with “more research is needed.” When that urge hits you, click: <http://www.theonion.com/article/new-study-shows-people-with-panic-disorders-respon-20892>

#3 Re-read Rule #1.

Guest Speaker Days

The procedure on guest speaker days will vary to some extent from speaker to speaker. However, the basic idea is that speakers will present then answer questions or lead discussion, staying with the class for 40-50 minutes. Upon their departure, students will spend a few minutes writing a short reflection statement (3-4 sentences) to spur further discussion.

Readings are assigned for most guest speaker days. In most cases, the assigned readings are for everyone to read, although on some occasions we have assigned different readings to each group. We will *not* have student presentations on guest speaker days.

In addition to readings, please look over our guests' bios in advance to learn about their work.

Debate Process

We will devote two class sessions to debates. The NC Advisory Committee on Cancer Coordination and Control is meeting with us to consider adopting a policy position on two issues. (Well, not really. Students not participating in each debate will constitute the Committee).

In a semi-formal point/counterpoint discussion, the Committee has given each expert group 12 minutes to present a case using PowerPoint (or other visual aids) for or against the position. The first group to present will be decided by a random process (coin flip).

Following the initial presentations, each group will have 3 minutes to collect thoughts and then 5 minutes for rebuttal of the opposing viewpoint. Following the rebuttals, each group will have 3 minutes to collect thoughts and then present a 2 minute concluding summary.

Following the presentations, rebuttals, and summaries, the moderator will allow questions from the Committee. Questions will be directed to one group or the other; however, both groups will be allowed to respond. Finally, the Committee will vote whether to adopt the policy position.

We'll *really* have to stick precisely to the time guidelines. Please arrive with enough time to load PowerPoint presentations before class. Be prepared to start right away at 9:30.

Steps in debate process	Time
Committee votes on issue. Tallies kept secret.	3
First debate group presents its case.	12
Second group presents opposing position.	12
Debators collect their thoughts.	3
Second group rebuttal	5
First group rebuttal	5
Debators collect their thoughts.	3
First group presents concluding summary.	2
Second group presents concluding summary.	2
Committee asks questions.	10
Committee votes.	3
Class compares, discusses pre/post debate tallies.	7

Total time

67 minutes

- The debate outcome/vote is *not* related to students' grades! Debate grades will be individual, and will be based upon quality/accuracy of the content provided, rhetorical quality of the position (logic, etc), and quality of the presentation (clarity, appropriate slides, timing, etc). In addition, the ability to think on one's feet, as demonstrated in rebuttal and summary, will also be considered. Preparation, including research into the opposing position, helps considerably.

Informational Interviews

Each student will conduct one informational interview on a cancer-related topic of his or her choice. Students may select a topic from the syllabus to explore in more depth or investigate an entirely new topic. After identifying a topic, students will develop a semi-structured discussion guide with input from the teaching team. Next, students will use their guides to conduct an interview, summarizing their findings in a 3-page report. Reports will include a brief statement of the public health problem (~0.5 pages, excluding references), a summary of key interview themes (1-1.5 pages), and a reflection on the implications of those themes for public health research and/or practice (1-1.5 pages).

The purpose of this assignment is to give students an opportunity to personalize the course content to their own interests and career goals. In selecting an interviewee, you may wish to think about the assignment as a networking opportunity. What cancer-related organizations or research groups have you always wanted to learn more about? What's the next "big idea" in the cancer prevention and control topic that intersect most meaningfully with your own professional interests?

- Students will receive individual grades for discussion guides and reports. The teaching team will provide guidance on how to develop a discussion guide and thematically analyze discussion content. No prior experience in qualitative methods is required.

School-wide positions and policies

Recognizing, Valuing, and Encouraging Diversity & Inclusion

We share the School's [commitment to diversity](#). We are committed to ensuring that the School is a diverse, inclusive, civil and welcoming community. Diversity and inclusion are central to our mission — to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world. Diversity and inclusion are assets that contribute to our strength, excellence and individual and institutional success. We welcome, value, and learn from individual differences and perspectives. These include but are not limited to: cultural and racial/ethnic background; country of origin; gender; age; socioeconomic status; physical and learning abilities; physical appearance; religion; political perspective; sexual identity and veteran status. Diversity, inclusiveness and civility are core values we hold, as well as characteristics of the School that we intend to strengthen.

We are committed to expanding diversity and inclusiveness across the School — among faculty, staff, students, on advisory groups, and in our curricula, leadership, policies and practices. We measure diversity and inclusion not only in numbers, but also by the extent to which students, alumni, faculty and staff members perceive the School's environment as welcoming, valuing all individuals and supporting their development.

In this class, we practice these commitments in the following ways:

- Develop classroom participation approaches that acknowledge the diversity of ways of contributing in the classroom and foster participation and engagement of *all* students.
- Structure assessment approaches that acknowledge different methods for acquiring knowledge and demonstrating proficiency.
- Encourage and solicit feedback from students to continually improve inclusive practices.

As a student, you are also expected to understand and uphold the following UNC policies:

Diversity and Inclusion at the Gillings School of Global Public Health:

<http://sph.unc.edu/resource-pages/diversity/>

UNC Non-Discrimination Policies: <http://policy.sites.unc.edu/files/2013/04/nondiscrim.pdf>

Prohibited Discrimination, Harassment, and Related Misconduct at UNC:

<https://deanofstudents.unc.edu/incident-reporting/prohibited-harassmentsexual-misconduct>

These resources are also of relevance:

Resources for Equity in Public Health

<https://docs.google.com/spreadsheets/d/1ni3gMokYtxXP116bjjhTSHqGITNwPBSsUuogavlXXJY/edit#gid=679802843>

UNC Honor Code

As a student at UNC-Chapel Hill, you are bound by the university's Honor Code, through which UNC maintains standards of academic excellence and community values. It is your responsibility to learn about and abide by the code. All written assignments or presentations (including team projects) should be completed in a manner that demonstrates academic integrity and excellence. Work should be completed in your own words, but your ideas should be supported with well-cited evidence and theory.

To ensure effective functioning of the Honor System at UNC, students are expected to:

- a. Conduct all academic work within the letter and spirit of the Honor Code, which prohibits the giving or receiving of unauthorized aid in all academic processes.
- b. Learn the recognized techniques of proper attribution of sources used in written work; and to identify allowable resource materials or aids to be used during completion of any graded work.
- c. Sign a pledge on all graded academic work certifying that no unauthorized assistance has been received or given in the completion of the work.
- d. Report any instance in which reasonable grounds exist to believe that a fellow student has violated the Honor Code.

Instructors are required to report suspected violations of the Honor Code, including inappropriate collaborative work or problematic use of secondary materials, to the Honor Court. Honor Court sanctions can include receiving a zero for the assignment, failing the course and/or suspension from the university. If you have any questions about your rights and responsibilities, please consult the Honor Code at: <http://honor.unc.edu/>, or consult these other resources:

- *Honor system* [tutorial](#):
- *UNC library's* [plagiarism tutorial](#)
- *UNC Writing Center* [handout on plagiarism](#)

Accessibility

UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), <http://accessibility.unc.edu/>; phone 919-962-8300, email accessibility@unc.edu. Students must document/register their need for accommodations with ARS before accommodations can be implemented.

Cancer Prevention and Control Seminar Reading List

The reading assignments are numbered 1-4 corresponding to each group number. The order in which the articles are listed is the preferred order of presentations. Readings have been posted to Sakai.

Class 1. Thursday, 1/11. Introduction

No reading.

TUESDAY, JANUARY 16. Cancer Prevention and Control Overview/Trends

Everyone

Progress in the War Against Cancer. *Am J Public Health Nations Health*. 1950 Oct;40(10):1313-4.

NCI Cancer Trends Progress Report. Trends at a glance. <https://progressreport.cancer.gov/trends>

1

Islami F, Goding Sauer A, Miller KD, et al. Proportion and number of cancer cases and deaths attributable to potentially modifiable risk factors in the United States. *CA Cancer J Clin*. 2018 Jan;68(1):31-54. *(This is one of the more challenging papers for today. Look for the main messages, and don't get too, too bogged down in the tables.)*

2

Colditz GA, Wolin KY, Gehlert S. Applying what we know to accelerate cancer prevention. *Sci Transl Med*. 2012 Mar 28;4(127):127rv4.

3

Mariotto AB, Yabroff KR, Shao Y, Feuer EJ, Brown ML. Projections of the cost of cancer care in the United States: 2010-2020. *J Natl Cancer Inst*. 2011 Jan 19;103(2):117-28.

4

Vineis P, Wild CP. Global cancer patterns: causes and prevention. *Lancet*. 2014 Feb 8;383(9916):549-57.

THURSDAY JANUARY 18. Cancer disparities in the US

Everyone

Aizer AA, Wilhite TJ, Chen MH, Graham PL, Choueiri TK, Hoffman KE, Martin NE, Trinh QD, Hu JC, Nguyen PL. Lack of reduction in racial disparities in cancer-specific mortality over a 20-year period. *Cancer*. 2014 May 15;120(10):1532-9.

Jones CP. Systems of power, axes of inequity: parallels, intersections, braiding the strands. *Medical Care*. 2014 Oct;52(10 Suppl 3):S71-5.

2

Ellis SD, Blackard B, Carpenter WR, Mishel M, *Chen RC, Godley PA*, Mohler JL, Bensen JT. Receipt of National Comprehensive Cancer Network guideline-concordant prostate cancer care among African American and Caucasian American men in North Carolina. *Cancer*. 2013 Jun 15;119(12):2282-90.

This editorial about the Ellis et al. paper could help you frame your presentation:

Master VA, Moses KA. Racial disparities in prostate cancer care: Is adherence to National Comprehensive Cancer Network guidelines good enough for our patients? *Cancer*. 2013 Jun 15;119(12):2209-11.

3

Emerson MA, Banegas MP, Chawla N, et al. Disparities in Prostate, Lung, Breast, and Colorectal Cancer Survival and Comorbidity Status among Urban American Indians and Alaskan Natives. *Cancer Res*. 2017 Dec 1;77(23):6770-6776.

4

Grubbs SS, Polite BN, Carney J, Bowser W, Rogers J, Katurakes N, Hess P, Paskett ED. Eliminating racial disparities in colorectal cancer in the real world: it took a village. *J Clin Oncol*. 2013 Jun 1;31(16):1928-30.

1

Valdovinos C, Penedo FJ, Isasi CR, et al. Perceived discrimination and cancer screening behaviors in US Hispanics: the Hispanic Community Health Study/Study of Latinos Sociocultural Ancillary Study. *Cancer Causes Control*. 2016 Jan;27(1):27-37.

Class 4. Tuesday, 1/23. Cancer disparities: Global snapshot

Everyone

Torre LA, Bray F, Siegel RL, Ferlay J, Lortet-Tieulent J, Jemal A. Global cancer statistics, 2012. *CA Cancer J Clin*. 2015 Mar 1;65(2):87-108.

OK to skim. Focus on the big picture, figures, and tables, as opposed to methods.

3

de Souza JA, Hunt B, Asirwa FC, Adebamowo C, Lopes G. Global health equity: Cancer care outcome disparities in high-, middle-, and low-income countries. *J Clin Oncol*. 2016 Jan 1;34(1):6-13.

4

Rodriguez-Galindo C, Friedrich P, Alcasabas P, Antillon F, Banavali S, Castillo L, Israels T, Jeha S, Harif M, Sullivan MJ, Quah TC. Toward the cure of all children with cancer through collaborative efforts: pediatric oncology as a global challenge. *J Clin Oncol*. 2015 Sep 20;33(27):3065-73.

1

Bray F, Jemal A, Torre LA, Forman D, Vineis P. Long-term realism and cost-effectiveness: Primary prevention in combatting cancer and associated inequalities worldwide. *J Natl Cancer Instit*. 2015 Sep 30;107(12):dju273.

2

Jemal A, Bray F, Forman D, O'Brien M, Ferlay J, Center M, Parkin DM. Cancer burden in Africa and opportunities for prevention. *Cancer*. 2012 Sep 15;118(18):4372-84.

Class 5. Thursday, 1/25. Early detection and screening, part 1

Everyone

Introduction chapter: Welch, H.G., 2004. *Should I be tested for cancer?: Maybe not and here's why*. Univ of California Press.

UK National Screening Committee: Criteria for appraising the viability, effectiveness and appropriateness of a screening programme.

<https://www.gov.uk/government/publications/evidence-review-criteria-national-screening-programmes/criteria-for-appraising-the-viability-effectiveness-and-appropriateness-of-a-screening-programme>

4

Smith RA, Andrews KS, Brooks D, et al. Cancer screening in the United States, 2017: A review of current American Cancer Society guidelines and current issues in cancer screening. *CA Cancer J Clin*. 2017;67(2):100-21.

1

Harris RP, Sheridan SL, Lewis CL, Barclay C, Vu MB, Kistler CE, Golin CE, DeFrank JT, Brewer NT. The harms of screening: a proposed taxonomy and application to lung cancer screening. *JAMA Intern Med*. 2014 Feb 1;174(2):281-5

2

Wegwarth O, Schwartz LM, Woloshin S, Gaissmaier W, Gigerenzer G. Do physicians understand cancer screening statistics? A national survey of primary care physicians in the United States. *Ann Intern Med*. 2012 Mar 6;156(5):340-9.

3

Barry MJ, Wexler RM, Brackett CD, Sepucha KR, Simmons LH, Gerstein BS, Stringfellow VL, Fowler FJ Jr. Responses to a Decision Aid on Prostate Cancer Screening in Primary Care Practices. *Am J Prev Med.* 2015 Oct;49(4):520-5.

Class 6. Tuesday, 1/30. Early detection and screening, part 2

Everyone

Knudsen AB, Zauber AG, Rutter CM, Naber SK, Doria-Rose VP, Pabiniak C, Johanson C, Fischer SE, Lansdorp-Vogelaar I, Kuntz KM. Estimation of benefits, burden, and harms of colorectal cancer screening strategies: Modeling study for the US Preventive Services Task Force. *JAMA.* 2016;315(23):2595-609.

1

Miller AB, Wall C, Baines CJ, Sun P, To T, Narod SA. Twenty five year follow-up for breast cancer incidence and mortality of the Canadian National Breast Screening Study: randomised screening trial. *BMJ.* 2014 Feb 11;348:g366.

“Annual mammography in women aged 40-59 does not reduce mortality from breast cancer beyond that of physical examination or usual care when adjuvant therapy for breast cancer is freely available.”

2

Weedon-Fekjær H, Romundstad PR, Vatten LJ. Modern mammography screening and breast cancer mortality: population study. *BMJ.* 2014 Jun 17;348:g3701. *Length: 8 pages*

“Invitation to modern mammography screening may reduce deaths from breast cancer by about 28%.”

3

Andriole GL, Crawford ED, Grubb RL, Buys SS, Chia D, Church TR, et al. Prostate cancer screening in the randomized Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial: mortality results after 13 years of follow-up. *J Natl Cancer Inst.* 2012 Jan 18;104(2):125-32.

4

The National Lung Screening Trial Research Team. Reduced lung-cancer mortality with low-dose computed tomographic screening. *NEJM.* 2011 Aug 4;365(5):395-409.

Class 7. Thursday, 2/1. Diet, physical activity, and weight

Everyone

Ligibel JA, Alfano CM, Courneya KS, Demark-Wahnefried W, Burger RA, Chlebowski RT, et al. American Society of Clinical Oncology position statement on obesity and cancer. *J Clin Oncol.* 2014 Nov 1;32(31):3568-74. ****Skim*

Lauby-Secretan B, Scoccianti C, Loomis D, Grosse Y, Bianchini F, Straif K; International Agency for Research on Cancer Handbook Working Group. Body fatness and cancer—viewpoint of the IARC Working Group. *N Engl J Med*. 2016;375(8):794-798. *****Skim**

2

Song M, Giovannucci E. Preventable Incidence and Mortality of Carcinoma Associated With Lifestyle Factors Among White Adults in the United States. *JAMA Oncol*. 2016 May 19.

3

Moore SC, Lee IM, Weiderpass E, Campbell PT, Sampson JN, Kitahara CM, et al. Association of Leisure-Time Physical Activity With Risk of 26 Types of Cancer in 1.44 Million Adults. *JAMA Int Med*. 2016 Jun 1;176(6):816-25.

4

Wang X, Ouyang Y, Liu J, Zhu M, Zhao G, Bao W, Hu FB. Fruit and vegetable consumption and mortality from all causes, cardiovascular disease, and cancer: systematic review and dose-response meta-analysis of prospective cohort studies. *BMJ*. 2014 Jul 29;349:g4490.

1

Birks S, Peeters A, Backholer K, O'Brien P, Brown W. A systematic review of the impact of weight loss on cancer incidence and mortality. *Obes Rev*. 2012 Oct 1;13(10):868-91.

Class 8. Tuesday, 2/6. Guest: Carmina Valle (Weight-related interventions)

Everyone

Please review Dr. Valle's faculty page: https://sph.unc.edu/adv_profile/carmina-g-valle-phd/

Valle CG, Deal AM, Tate DF. Preventing weight gain in African American breast cancer survivors using smart scales and activity trackers: a randomized controlled pilot study. *J Cancer Surviv*. 2017 Feb;11(1):133-148.

Please also select 1 or more papers from the following list

Tate DF, Lyons EJ, Valle CG. High-tech tools for exercise motivation: use and role of technologies such as the internet, mobile applications, social media, and video games. *Diabetes Spectr*. 2015 Jan;28(1):45-54.

Masseti GM, Dietz WH, Richardson LC. Excessive Weight Gain, Obesity, and Cancer: Opportunities for Clinical Intervention. *JAMA*. 2017 Nov 28;318(20):1975-1976.

Wing RR, Tate DF, Espeland MA, Lewis CE, LaRose JG, Gorin AA, Bahnson J, Perdue LH, Hatley KE, Ferguson E, Garcia KR, Lang W; Study of Novel Approaches to Weight Gain Prevention (SNAP) Research Group. Innovative Self-Regulation Strategies to Reduce Weight

Gain in Young Adults: The Study of Novel Approaches to Weight Gain Prevention (SNAP) Randomized Clinical Trial. *JAMA Intern Med.* 2016 Jun 1;176(6):755-62.

Class 9. Thursday, 2/8. Infectious agents: HPV

Everyone

Plummer M, de Martel C, Vignat J, Ferlay J, Bray F, Franceschi S. Global burden of cancers attributable to infections in 2012: a synthetic analysis. *Lancet Glob Health.* 2016 Sep;4(9):e609-16. ****Skim**

3

Walker TY, Elam-Evans LD, Singleton JA, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2016. *MMWR Morb Mortal Wkly Rep* 2017;66:874–882.

4

Dunn AG, Surian D, Leask J, Dey A, Mandl KD, Coiera E. Mapping information exposure on social media to explain differences in HPV vaccine coverage in the United States. *Vaccine.* 2017 May 25;35(23):3033-3040

1

Gilkey MB, Malo TL, Shah PD, Hall ME, Brewer NT. Quality of physician communication about human papillomavirus vaccine: findings from a national survey. *Cancer Epidemiol Biomarkers Prev.* 2015 Nov 1;24(11):1673-9.

2

Brewer NT, Hall ME, Malo TL, Gilkey MB, Quinn B, Lathren C. Announcements versus conversations to improve HPV vaccination coverage: A randomized trial. *Pediatrics.* 2017 Jan;139(1). pii: e20161764.

Class 10. Tuesday 2/13. UV exposure and melanoma

Everyone

Watch “Dear 16 year old me video”: <https://www.youtube.com/watch?v=4jgUcxMezM>

Watch “How the sun sees you”: <https://www.youtube.com/watch?v=o9BqrSAHbTc>

Watch “Mollie’s Fund – Mr. Sun”: https://www.youtube.com/watch?v=heQOFK_gaGg

US Preventive Services Task Force. Screening for skin cancer: US Preventive Services Task force Recommendation Statement. *JAMA.* 2016;316(4):429-35. *****SKIM**

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of visual skin examination by a clinician to screen for skin cancer in adults (I statement).

4

Guy GP Jr, Berkowitz Z, Jones SE, Olsen EO, Miyamoto JN, Michael SL, Saraiya M. State indoor tanning laws and adolescent indoor tanning. *Am J Public Health*. 2014 Apr;104(4):e69-74.

1

Coups EJ, Stapleton JL, Delnevo CD. Indoor tanning among New Jersey high school students before and after the enactment of youth access restrictions. *J Am Acad Dermatol*. 2016 Aug;75(2):440-2.

You may wish to consider Watson & Guy's comment and Coups et al's reply:

Watson M, Guy GP. Indoor tanning among New Jersey high school students before and after the enactment of youth access restrictions. *J Am Acad Dermatol*. 2017 Feb;76(2):e67-e68.

Coups EJ, Stapleton JL, Delnevo CD. Reply to: "Indoor tanning among New Jersey high school students before and after the enactment of youth access restrictions". *J Am Acad Dermatol*. 2017 Feb;76(2):e69.

2

Makin JK, Warne CD, Dobbins SJ, Wakefield MA, Hill DJ. Population and age-group trends in weekend sun protection and sunburn over two decades of the SunSmart programme in Melbourne, Australia. *Br J Dermatol*. 2013 Jan;168(1):154-61.

3

Seidenberg AB, Mahalingam-Dhingra A, Weinstock MA, Sinclair C, Geller AC. Youth indoor tanning and skin cancer prevention: lessons from tobacco control. *Am J Prev Med*. 2015 Feb;48(2):188-194.

Class 11. Thursday 2/15. Reproductive factors in cancer prevention and control

*****INTERVIEW GUIDES DUE**

1

Gong TT, Wang YL, Ma XX. Age at menarche and endometrial cancer risk: a dose-response meta-analysis of prospective studies. *Scientific reports*. 2015;5.

2

Iversen L, Sivasubramaniam S, Lee AJ, Fielding S, Hannaford PC. Lifetime cancer risk and combined oral contraceptives: the Royal College of General Practitioners' Oral Contraception Study. *American Journal of Obstetrics and Gynecology*. 2017;216(6):580-e1.

3

Beaber EF, Buist DS, Barlow WE, Malone KE, Reed SD, Li CI. Recent oral contraceptive use by formulation and breast cancer risk among women 20 to 49 years of age. *Cancer Research*. 2014;74(15):4078-4089.

4

Albrektsen G, Heuch I, Hansen S, Kvåle G. Breast cancer risk by age at birth, time since birth and time intervals between births: exploring interaction effects. *British Journal of Cancer*. 2005;92(1):167-175. doi:10.1038/sj.bjc.6602302.

Class 12. Tuesday, 2/20. Precision medicine

Everyone

Collins FS, Varmus H. A new initiative on precision medicine. *N Engl J Med*. 2015 Feb 26;372(9):793-5.

2

Mendelsohn J. Personalizing oncology: perspectives and prospects. *J Clin Oncol*. 2013 May 20;31(15):1904-11.

Your challenge is to describe precision medicine for us without getting bogged down in alphabet soup. Try to lay out for the class where precision fits in the cancer control continuum, as well as the categories of potential intervention points.

About the painting referred to in the Mendelsohn article:

<http://www.gauguin.org/where-do-we-come-from-what-are-we.jsp>

3

Khoury MJ, Galea S. Will precision medicine improve population health? *JAMA*. 2016;316(13):1357-8.

4

Rubin R. Precision medicine: the future or simply politics? *JAMA*. 2015 Mar 17;313(11):1089-91.

NCI-Molecular Analysis for Therapy Choice (NCI-MATCH) Trial. NIH National Cancer Institute website. Updated 5/31/2016. Accessed 6/30/2016 from: <http://www.cancer.gov/about-cancer/treatment/clinical-trials/nci-supported/nci-match>

The NCI website details a trial referenced in the Rubin piece. In your presentation, describe this study design for us.

1

Onega T, Beaber EF, Sprague BL, Barlow WE, Haas JS, Tosteson AN, D Schnall M, Armstrong K, Schapira MM, Geller B, Weaver DL. Breast cancer screening in an era of personalized regimens: A conceptual model and National Cancer Institute initiative for risk-based and preference-based approaches at a population level. *Cancer*. 2014 Oct 1;120(19):2955-64.

Class 13. Thursday, 2/22. Guest: Jim Evans (Genomics/Precision Medicine)

Everyone

Review Dr. Evans's UNC faculty webpage: <https://www.med.unc.edu/genetics/people/primary-faculty/jim-evans-md-phd>

Please select 2 or more papers from the following list

Evans JP, Powell BC, Berg JS. Finding the rare pathogenic variants in a human genome. *JAMA*. 2017;317(18):1904-5.

Khoury MJ, Evans JP. A public health perspective on a national precision medicine cohort. *JAMA*. 2015;313(21):2117-8.

Allyse M, Evans JP, Michie M. Dr. Pangloss's clinic: prenatal whole genome sequencing and a return to reality. *American Journal of Bioethics*. 2017; 17:21-3.

Evans JP, Berg JS, Olshan AF, Magnuson T, Rimer BK. We screen newborns, don't we? Realizing the promise of public health genomics. *Genetics in Medicine*. 2013;15(5):332-4.

Class 14. Tuesday, 2/27. Tobacco

Everyone

Jamal A, Gentzke A, Hu SS, Cullen KA, Apelberg BJ, Homa DM, King BA. Tobacco Use Among Middle and High School Students - United States, 2011-2016. *MMWR Morb Mortal Wkly Rep*. 2017 Jun 16;66(23):597-603.

3

Schane RE, Ling PM, Glantz SA. Health effects of light and intermittent smoking: a review. *Circulation*. 2010 Apr 6;121(13):1518-22.

4

Montazeri Z, Nyiraneza C, El-Katerji H, Little J. Waterpipe smoking and cancer: systematic review and meta-analysis. *Tob Control*. 2017;26(1):92-97.

1

Cantrell J, Pearson JL, Anesetti-Rothermel A, Xiao H, Kirchner TR, Vallone D. Tobacco Retail Outlet Density and Young Adult Tobacco Initiation. *Nicotine Tob Res.* 2016 Feb;18(2):130-7.

2

Oberg M, Jaakkola MS, Woodward A, et al. Worldwide burden of disease from exposure to second-hand smoke: a retrospective analysis of data from 192 countries. *Lancet.* 2011;377(9760):139-46.

Class 15. Thursday, 3/1. Interventions: Tobacco Policy

Everyone

Husten CG, Deyton LR. Understanding the Tobacco Control Act: efforts by the US Food and Drug Administration to make tobacco-related morbidity and mortality part of the USA's past, not its future. *Lancet.* 2013;381(9877):1570-80.

Song AV, Dutra L, Neilands TB, Glantz SA. Association of smoke-free laws with lower percentages of new and current smokers among adolescents and young adults. *JAMA Peds.* 2015;169(9):e152285. *****Okay to read abstract only**

4

Donny EC, Denlinger RL, Tidey JW, et al. Randomized Trial of Reduced-Nicotine Standards for Cigarettes. *N Engl J Med.* 2015 Oct; 373(14): 1340–1349.

1

Wakefield M, Coomber K, Zacher M. et al. Australian adult smokers' responses to plain packaging with larger graphic health warnings 1 year after implementation: results from a national cross-sectional tracking survey. *Tob Control.* 2015 Apr; 24(Suppl 2): ii17–ii25.

2

Golden SD, Smith MH, Feighery EC, Roeseler A, Rogers T, Ribisl KM. Beyond excise taxes: a systematic review of literature on non-tax policy approaches to raising tobacco product prices. *Tobacco control. Tob Control*. 2016 Jul;25(4):377-85.

3

Neff LJ, Patel D, Davis K, Ridgeway W, Shafer P, Cox S. Evaluation of the National Tips From Former Smokers Campaign: the 2014 Longitudinal Cohort. *Prev Chronic Dis*. 2016 Mar 24;13:E42.

Class 16. Tuesday, 3/6. Guest: Ron Chen (Prostate Cancer)

Everyone

Review Dr. Chen's faculty profile: <https://unclineberger.org/people/profiles/ronald-c.-chen>

Holmes JA, Bensen JT, Mohler JL, Song L, Mishel MH, Chen RC. Quality of care received and patient-reported regret in prostate cancer: Analysis of a population-based prospective cohort. *Cancer*. 2017 Jan 1;123(1):138-143.

Chen RC, Basak R, Meyer AM, et al. Association Between Choice of Radical Prostatectomy, External Beam Radiotherapy, Brachytherapy, or Active Surveillance and Patient-Reported Quality of Life Among Men With Localized Prostate Cancer. *JAMA*. 2017 Mar 21;317(11):1141-1150.

Class 17. Thursday, 3/8. Guest: Matt Varga (H pylori)

Everyone

Please review Dr. Varga's webpage: <http://unclineberger.org/education/cancer-control-education-program/people/matthew-varga-phd>

Marhsall BJ. Nobel lecture: Helicobacter connections. 2005. Available at: https://www.nobelprize.org/nobel_prizes/medicine/laureates/2005/marshall-lecture.pdf

O'Connor A, O'Morain CA, Ford AC. Population screening and treatment of *Helicobacter pylori* infection. *Nature*. 2017;14:230-240.

*****March 13 and 15. SPRING BREAK*****

No reading.

Class 18. Tuesday, 3/20. Debate 1

No reading.

Class 19. Thursday, 3/22. Debate 2

No reading.

Class 20. Tuesday, 3/27. Environment

Everyone:

Peterson E, Aker A, Kim J, et al. Lung cancer risk from radon in Ontario, Canada: how many lung cancers can we prevent? *Cancer Causes & Control*. 2013;24(11):2013-20.

Wu S, Powers S, Zhu W, Hannun YA. Substantial contribution of extrinsic risk factors to cancer development. *Nature*. 2016 Jan 7;529(7584):43-7. *****Abstract only**

1

Winn DM. Science and society: the Long Island Breast Cancer Study Project. *Nat Rev Cancer*. 2005 Dec;5(12):986-94.

Rodgers KM, Udesky JO, Rudel RA, Brody JG. Environmental chemicals and breast cancer: An updated review of epidemiological literature informed by biological mechanisms. *Environ Res*. 2018 Jan;160:152-182. *****Abstract only**

2

Hosgoodiii HD, Chapman RS, He X, Hu W, Tian L, Liu LZ, Lai H, Chen W, Rothman N, Lan Q. History of lung disease and risk of lung cancer in a population with high household fuel combustion exposures in rural China. *Lung Cancer*. 2013 Sep;81(3):343-6.

3

Kassotis CD, Tillitt DE, Davis JW, Hormann AM, Nagel SC. Estrogen and androgen receptor activities of hydraulic fracturing chemicals and surface and ground water in a drilling-dense region. *Endocrinology*. 2014 Mar;155(3):897-907. *****Abstract and Discussion only**

Mitka M. Rigorous evidence slim for determining health risks from natural gas fracking. *JAMA*. 2012 May 23;307(20):2135-6.

4

Corle C, Makale M, Kesari S. Cell phones and glioma risk: a review of the evidence. *J Neurooncol*. 2012 Jan;106(1):1-13.

Class 21. Thursday, 3/29. Chemoprevention of breast and colon cancers

Everyone

Look over: USPSTF. Breast Cancer: Medications for risk reduction. September, 2013.
<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-medications-for-risk-reduction>

Look over: USPSTF. Final Recommendation Statement. Aspirin Use to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication. April, 2016.
<http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/aspirin-to-prevent-cardiovascular-disease-and-cancer>

2

Freedman AN, Yu B, Gail MH, Costantino JP, Graubard BI, Vogel VG, Anderson GL, McCaskill-Stevens W. Benefit/risk assessment for breast cancer chemoprevention with

raloxifene or tamoxifen for women age 50 years or older. *J Clin Oncol*. 2011 Jun 10;29(17):2327-33.

3

Wheeler SB, Roberts MC, Bloom D, Reeder-Hayes KE, Espada M, Peppercorn J, Golin CE, Earp JA. Oncologic Providers' Perspectives on Endocrine Therapy Prescribing and Management. *Patient Prefer Adherence*. 2016. In press.

4

Cuzick J, Sestak I, Forbes JF, Dowsett M, Knox J, Cawthorn S, Saunders C, Roche N, Mansel RE, von Minckwitz G, Bonanni B, Palva T, Howell A; IBIS-II investigators. Anastrozole for prevention of breast cancer in high-risk postmenopausal women (IBIS-II): an international, double-blind, randomized placebo-controlled trial. *Lancet*. 2014 Mar 22;383(9922):1041-8.

1

Friis S, Riis AH, Erichsen R, Baron JA, Sørensen HT. Low-dose aspirin or nonsteroidal anti-inflammatory drug use and colorectal cancer risk: a population-based, case-control study. *Ann Intern Med*. 2015 Sep 1;163(5):347-55.

22. Tuesday, 4/3. Guests: Stephanie Wheeler & Katie Reeder-Hayes (Breast Cancer Treatment Disparities)

Everyone

Please review faculty pages for Dr. Wheeler (http://sph.unc.edu/adv_profile/stephanie-b-wheeler-phd/) and Dr. Reeder-Hayes (<https://unclineberger.org/people/profiles/katie-reeder-hayes>)

Wheeler SB, Reeder-Hayes KE, Carey LA. Disparities in breast cancer treatment and outcomes: biological, social, and health system determinants and opportunities for research. *Oncologist*. 2013 Sep 1;18(9):986-93.

Please also select 1 or more papers from the following list

Roberts MC, Wheeler SB, Reeder-Hayes K. Racial/ethnic and socioeconomic disparities in endocrine therapy adherence in breast cancer: a systematic review. *Am J Public Health*. 2015 Jul;105 Suppl 3:e4-e15.

Reeder-Hayes KE, Wheeler SB, Baggett CD, Zhou X, Meng K, Roberts MC, Carey LA, Meyer AM. Influence of provider factors and race on uptake of breast cancer gene expression profiling. *Cancer*. 2018 Jan 16. doi: 10.1002/cncr.31222. [Epub ahead of print]

23. Thursday, 4/5. Health services interventions

3

Jena AB, Huang J, Fireman B, Fung V, Gazelle S, Landrum MB, Chernew M, Newhouse JP, Hsu J. Screening Mammography for Free: Impact of Eliminating Cost Sharing on Cancer Screening Rates. *Health Serv Res.* 2017 Feb;52(1):191-206.

4

Myers RE, Sifri R, Daskalakis C, DiCarlo M, Geethakumari PR, Cocroft J, Minnick C, Brisbon N, Vernon SW. Increasing colon cancer screening in primary care among African Americans. *J Natl Cancer Inst.* 2014 Dec 6;106(12).

1

Choi, SK, Adams SA, Eberth JM, Brandt HM, Friedman DB, Tucker-Seeley RD, Yip MP, Hebert JR. Medicaid Coverage Expansion and Implications for Cancer Disparities. *AJPH.* 2015 Nov;105 Suppl 5:S706-12.

2

Rocque GB, Williams CP, Jackson BE, Wallace AS, Halilova KI, Kenzik KM, Partridge EE, Pisu M. Choosing Wisely: Opportunities for Improving Value in Cancer Care Delivery? *J Oncol Pract.* 2017 Jan;13(1):e11-e21.

Class 24. Tuesday, 4/10. Guest: Sarah Birken (Survivorship care plans)

*****DRAFT THEMATIC SUMMARY DUE (but not for a grade!)**

Everyone

Please review Dr. Birken's faculty page: https://sph.unc.edu/adv_profile/sarah-birken-phd/

Selove R, Birken SA, Skolarus TA, Hahn EE, Sales A, Proctor EK. Using Implementation Science to Examine the Impact of Cancer Survivorship Care Plans. *J Clin Oncol.* 2016 Nov 10;34(32):3834-3837.

Mayer DK, Birken SA, Chen RC. Avoiding Implementation Errors in Cancer Survivorship Care Plan Effectiveness Studies. *J Clin Oncol.* 2015 Nov 1;33(31):3528-30.

Optional (to contextualize Mayer et al.)

Nicolaije KA, Ezendam NP, Vos MC, et al. Impact of an Automatically Generated Cancer Survivorship Care Plan on Patient-Reported Outcomes in Routine Clinical Practice: Longitudinal Outcomes of a Pragmatic, Cluster Randomized Trial. *J Clin Oncol.* 2015 Nov 1;33(31):3550-9.

Class 25. Thursday, 4/12. Patient-centered care and outcomes

Everyone

**In preparation for our book discussion next week, each group should email two discussion questions to the TAs by Monday, 4/16.

Basch E. Patient-Reported Outcomes - Harnessing Patients' Voices to Improve Clinical Care. *N Engl J Med*. 2017 Jan 12;376(2):105-108.

4

Reeve BB, Mitchell SA, Dueck AC, Basch E, Cella D, Reilly CM, Minasian LM, Denicoff AM, O'Mara AM, Fisch MJ, Chauhan C, Aaronson NK, Coens C, Bruner DW. Recommended patient-reported core set of symptoms to measure in adult cancer treatment trials. *J Natl Cancer Inst*. 2014 Jul 8;106(7). pii: dju129.

1

Stover A, Irwin DE, Chen RC, Chera BS, Mayer DK, Muss HB, Rosenstein DL, Shea TC, Wood WA, Lyons JC, Reeve BB. Integrating Patient-Reported Outcome Measures into Routine Cancer Care: Cancer Patients' and Clinicians' Perceptions of Acceptability and Value. *EGEMS (Wash DC)*. 2015 Oct 29;3(1):1169.

2

Epstein RM, Duberstein PR, Fenton JJ, et al. Effect of a Patient-Centered Communication Intervention on Oncologist-Patient Communication, Quality of Life, and Health Care Utilization in Advanced Cancer: The VOICE Randomized Clinical Trial. *JAMA Oncol*. 2017 Jan 1;3(1):92-100.

3

Tanco K, Rhondali W, Perez-Cruz P, Tanzi S, Chisholm GB, Baile W, Frisbee-Hume S, Williams J, Masino C, Cantu H, Sisson A, Arthur J, Bruera E. Patient Perception of Physician Compassion After a More Optimistic vs a Less Optimistic Message: A Randomized Clinical Trial. *JAMA Oncol*. 2015 May;1(2):176-83.

In considering this piece, you may wish to skim: Minami CA, Yang AD, Szmuiłowicz E. Negotiating the Tensions in Patient-Centered Care. *JAMA*. 2015 Sep 15;314(11):1167-8.

Class 26. Tuesday, 4/17. Guest: Yousuf Zafar (Financial toxicity)

Everyone

Please review Dr. Zafar's faculty page: <https://globalhealth.duke.edu/people/faculty/zafar-yousuf>

Zafar SY, Peppercorn JM, Schrag D, Taylor DH, Goetzinger AM, Zhong X, Abernethy AP. The financial toxicity of cancer treatment: a pilot study assessing out-of-pocket expenses and the insured cancer patient's experience. *Oncologist*. 2013;18(4):381-90.

Zafar SY. Financial Toxicity of Cancer Care: It's Time to Intervene. *J Natl Cancer Inst*. 2016 Dec 11;108(5).

Class 27. Thursday, 4/19. Book Discussion

Everyone

Gawande, A. (2014). *Being mortal: Medicine and what matters in the end*. Macmillan.

Class 28. Tuesday, 4/24. Patient advocacy

Everyone

Susan G Komen. Participate. <https://ww5.komen.org/GetInvolved/Participate/Participate.html>

National Breast Cancer Coalition. <http://www.breastcancerdeadline2020.org/get-involved/>

Breast Cancer Action. Think Before You Pink. <http://thinkbeforeyoupink.org/past-campaigns/>

1

Klawiter M. Breast cancer in two regimes: the impact of social movements on illness experience. *Sociol Health Illn*. 2004 Sep;26(6):845-74.

2

Lerner BH. Breast cancer activism: past lessons, future directions. *Nat Rev Cancer*. 2002 Mar;2(3):225-30.

3

Martinez KA, Rothberg MB. Divergent Responses to Mammography and Prostate-Specific Antigen Recommendations. *Am J Prev Med*. 2017 Oct;53(4):533-536.

4

Gilkey MB. Supporting cancer survivors' participation in peer review: perspectives from NCI's CARRA program. *J Cancer Surviv*. 2014 Mar;8(1):114-20.

Class 29. Thursday, 4/26. Conclusions

*****INTERVIEW REPORT DUE**

Everyone

Lowy DR, Collins FS. Aiming high—Changing the trajectory for cancer. *NEJM* 2016;374:1901-4.