# **GS04 1263: Cancer Epidemiology**

Crosslisted course at School of Public Health (PH 2745)

Course Directors: Michelle Hildebrandt, PhD and Veronika Fedirko, PhD

Class Format: In-person (UTSPH- Reuel Stallones Building E605) and via WebEx

Instructor & TA Information (for each Faculty and TA)  • Michelle Hildebrandt, PhD • Jennifer Davis, PhD • Qian Xiao, PhD (administrative lead for UTSPH)  MHildebr@mdanderson.org / (713) 792-2242 / MDACC-SCRB1 (SCR2.3017)  JSDavis@mdanderson.org / (713) 563-0381 / MDACC-CPB7.3562 Qian.xiao@uth.tmc.edu / (713) 500-9233 / UTSPH E603  • Office hours: By appointment. Students can contact instructors by email or phone to set up an appointment. Students at off campus sites will be assisted by telephone/teleconference  Course Description  • Cancer Epidemiology, PH 2745 • Summer Semester Tuesday and Thursday 10:00-11:50  • Credits 3.0  • Format: ITV and Face-to-face (hybrid and remote delivery)  • Course Description - A lecture/seminar course that reviews the epidemiology of major cancers by anatomic site and discusses seminal studies and current issues in cancer epidemiological research including methodology, cancer surveillance, international studies, observational studies, and intervention trials. The course will include an overview of basic concepts pertinent to cancer epidemiology research and prevention	Г /				
Information (for each Faculty and TA)	Feature	Considerations			
Qian Xiao, PhD (administrative lead for UTSPH)		Michelle Hildebrandt, PhD			
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Course Learning "As a result of taking this course, the students will be able to"	Course Learning	"As a result of taking this course, the students will be able to"			
•	_	• Identify the most common types of cancer in the US and contrast them with			
<ul> <li>Identify differences between the epidemiology and clinical aspects of different types of cancer</li> </ul>		Identify differences between the epidemiology and clinical aspects of			
Critically evaluate studies of environmental risk factors for the development of cancer		Critically evaluate studies of environmental risk factors for the			

	<ul> <li>Identify environmental risk factors for cancer that have the highest impact on the incidence of common cancers</li> <li>Critically evaluate studies of genomic risk factors for the development of cancer</li> <li>Identify genetic variants that have the highest impact on the incidence of common types of cancer</li> <li>Speak fluently about recent advances and emerging methodologies used in research in cancer epidemiology</li> </ul>
List of Topics	<ul> <li>Introduction to Cancer Epidemiology</li> <li>Introduction to Cancer Biology, Genetics and Molecular Epidemiology</li> <li>Cacer risk factors</li> <li>Cancer outcomes research.</li> <li>Site specific cancers.</li> <li>Health behaviors and cancer.</li> <li>Resources for cancer epidemiology research.</li> </ul>
Learning Activities	<ul> <li>Attend class</li> <li>Participate in class discussions and seminars</li> <li>Prepare to present each of the assigned journal articles. Articles will be provided 1 week or more prior to presentation date. For each discussion, several students will be assigned to give a 20-minute presentation. After the presentation students will be randomly selected to lead a class discussion of the article.</li> </ul>
Grading	<ul> <li>This is a pass/fail class. In order to pass students must complete the following 2 activities: 1) Be present for the duration of 20 of the 24 class sessions (In order to be considered present students must arrive by 10:10 and stay until 11:50), 2) Prepare to review and critique each of the 10 articles on current topics in cancer epidemiologic research as described above.</li> <li>Students who miss more than 4 class sessions can make up a maximum of 2 additional class sessions. To make up a class session, students must complete two activities: 1) Submit a written summary of the lecture including two thoughtful questions for the lecturer 2) For seminars on journal articles, submit a 1-page critique. If students miss more than 6 class sessions they must withdraw from the class or receive a failing grade. In the event of illness or other emergency, students may take an incomplete and complete these activities sometime before the end of the fall semester. Incompletes will not be offered for students who miss more than 6 class sessions. All incompletes must be resolved before the end of Fall Semester.</li> </ul>
Prerequisites and/or	<ul> <li>Prerequisites: Introduction to Epidemiology &amp; Intermediate Biostatistics I or consent of instructor</li> <li>No technical requirements</li> </ul>

## Technical Requirements

#### Withdrawal Information:

- See UTHealth academic calendar for the last day to withdraw from this class
- See UTSPH website for forms to withdraw from a class

# • Incomplete Grades:

o If you cannot complete the necessary assignments before the last day of class on August 5<sup>th</sup>, see Dr. Xiao (in person or via email) to request an incomplete. Incompletes will not be offered to students who miss more than 6 class sessions.

## • SPH Writing Support Services

SPH Writing Support Services provides free writing instruction for all students at all stages of the writing process. An ESL training specialist and an Academic Writing training specialist are available for in-person and online writing consultations. During each writing consultation, the training specialist will work with you to meet your and your instructor's goals for a particular writing assignment. SPH Writing Support Services will assist you in many areas of writing to help you take responsibility for your own writing.

SPH Writing Support Services is located in the SPH Library (RAS E-125) in the Houston campus, but it is available to students at all SPH campuses via interactive television (ITV). To schedule an in-person appointment or an ITV session with SPH Writing Support Services, please call 713-500-9121 or e-mail SPHWritingHub@uth.tmc.edu.

#### • ADA Accommodation

UT Policy on Accommodations for Disabilities: UTHealth is committed to providing equal opportunities for qualified employees, job applicants, and students with disabilities in accordance with state and federal law. Student applicants and enrolled students can obtain information concerning program-related accommodations in each school from the school's Section 504 Coordinator (usually found in the Student Affairs office of each school). The Disability Coordinator (in Human Resources) and the Section 504 Coordinators can provide information and referrals regarding campus accessibility, disabled parking permits, transportation services, and other resources. The full policy can be found online in HOOP Policy Number 101, Disability Accommodation

(http://www.uth.edu/hoop/policy.htm?id=1448050). If you believe you have a disability requiring an accommodation, whether new or existing, please contact Mary Ann Smith, Assistant Dean of Students and ADA Accommodation Coordinator for UTHealth School of Public Health at mary.a.smith@uth.tmc.edu or (713) 500-9236

### • Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Individuals found guilty of academic dishonesty may be dismissed from the degree program. It is a student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. Any student accused of a specific act stated in the previous paragraph is subject to UTHealth School of Public Health academic policies and procedures pertaining to violations of the student code of conduct for academic integrity. Each student in this course is expected to abide by the UTHealth School of Public Health Honor Code signed at first matriculation. Any work submitted by a student in this course for academic credit will be the student's own work.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment file, a diskette, or a hard copy. During any quiz or exam you must do your own work. Talking or discussion is not permitted during a quiz or exam unless specifically stated, nor may you compare papers, copy from others, lend or borrow calculators, or electronic devices, or collaborate in any way unless specifically stated. Any collaborative behavior during a quiz or exam will result in failure, and may lead to failure of the course and UTHealth SPH disciplinary action. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both held accountable.

Please remember that you signed the academic integrity policy at orientation. No academic dishonesty of any kind (including copying/plagiarism) will be tolerated. All suspected academic dishonesty (actual or attempted) or other violations of the student code of conduct will be immediately reported to the UTHealth SPH Associate Dean for Academic Affairs. You can review the Student Conduct and Discipline Policy in the Handbook of Operating Procedures (HOOP) at https://www.uth.edu/hoop/policy.htm?id=1448220

Date	Topic(s)	Speaker
May 18 (Tue)	1.0010(0)	Opounoi
10-10:50	Introduction to Course	
11-11:50	Methodological Issues in Cancer Epidemiology	Qian Xiao, PhD
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May 20 (Th)		
10-10:50	Introduction to Cancer Biology	Jen Davis, PhD
11-11:50	Introduction to Genetics & Molecular Epidemiology	Michelle Hildebrandt, PhD
May 25 (Tue)		,
10-10:50	Cancer Biomarkers & Technology	Jian Gu, PhD
11-11:50	Genetics and Genomics	Chad Huff, PhD
		,
May 27 (Th)		
10-10:50	IRB Considerations for Cancer Epidemiology Studies	Dima Suki, Ph.D.
11-11:50	ARTICLE DISCUSSION – BIOMARKERS	·
June 1 (Tue)		
10-10:50	Sleep and Circadian Rhythm	Qian Xiao, PhD
11-11:50	Nutritional Epidemiology and Energy Balance	Carrie Daniel, PhD, MPH
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June 3 (Th)		
10-10:50	Risk Communications	Susan Peterson, PhD, MPH
11-11:50	ARTICLE DISCUSSION – MICROBIOME	
June 8 (Tu)	, <u>-</u>	
10-10:50	Cancer Prevention	Priya Thomas, MD
11-11:50	Evidenced-based Cancer Screening	Terry Bevers, MD
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June 10 (Th)		
10-10:50	Occupational Exposures and Cancer Risk	George Delclos, MD, PhD
11-11:50	ARTICLE DISCUSSION – SCREENING	
June 15 (Tu)	,	
10-10:50	Endometrial Cancer	Melinda Yates, PhD
11-11:50	Non-Melanoma Skin Cancer	Mackenzie Wehner, MD
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June 17 (Th)		
10-10:50	Lung Cancer Screening	Lisa Lowenstein, PhD, MPH
11-11:50	Tobacco Cessation	Jason Robinson, PhD
June 22 (Tu)		,
10-10:50	Parathyroid Cancer	Nancy Perrier, MD
11-11:50	Breast Cancer	Mariana Chavez MacGregor, MD
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June 24 (Th)		
10-10:50	Breast Cancer Treatment Toxicities	Kevin Nead, MD
11-11:50	ARTICLE DISCUSSION – PARATHYROID CANCER	
June 29 (Tu)		
10-10:50	Pancreatic Cancer Clinical Aspects	Florencia McCallister, MD, PhD
11-11:50	Pancreatic Cancer Epidemiology	Donghui Li, PhD
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July 1 (Th)		
10-10:50	Liver Cancer Epidemiology	Manal Hassan, PhD
11-11:50	ARTICLE DISCUSSION – PANCREATIC CANCER	, , , , , , , , , , , , , , , , , , ,
July 6 (Tu)		
10-10:50	Prostate Cancer Epidemiology	David Lopez, DrPH, MPH
11-11:50	ARTICLE DISCUSSION – LIVER CANCER	·
July 8 (Th)		
10-10:50	Colorectal Cancer Epidemiology	Jen Davis, PhD
11-11:50	Colorectal Cancer Clinical Aspects	Scott Kopetz, MD
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July 13 (Tu) 10-10:50	Radiation and Cancer Risk	Michelle Ludwig, MD, MPH
11-11:50	Myeloma Epidemiology	Michelle Hildebrandt, PhD
July 15 (Th)		
10-10:50	Melanoma	Isabella Glitza, MD
11-11:50	ARTICLE DISCUSSION – MELANOMA	
July 20 (Tu)		
10-10:50	Cervical Cancer	Project ECHO team
11-11:50	Head and Neck Cancer	Erich Sturgis, MD
July 22 (Th)		
10-10:50	Lymphoma	Dai Chihara, MD, PhD
11-11:50	ARTICLE DISCUSSION – HPV	
July 27 (Tu)		
10-10:50	Leukemia	Courtney DiNardo, MD
11-11:50	Brain Cancer Epidemiology	Michael Scheurer, PhD, MPH
July 29 (Th)		
10-10:50	Survivorship Research	Michelle Hildebrandt, PhD
11-11:50	ARTICLE DISCUSSION – LEUKEMIA	,
Aug 3 (Tu)		
10-10:50	Childhood and AYA Cancer	Michael Roth, MD
11-11:50	Cancer Survivor Panel	Rebecca Kaul
Aug 5 (Th)		
10-10:50	ARTICLE DISCUSSION – SURVIVORSHIP	
11-11:50	Final Discussion	