Departments of Biostatistics, Environmental Health, Epidemiology, and Society, Human Development & Health

Harvard School of Public Health





Summer Program in Quantitative Sciences 2009





Unless noted otherwise, AM Morning classes and other events will meet in FXB G-11 Lectures will meet in Biostatistics conference room 2-426 Intro to Stata and Computer Lab Hours will meet in Kresge 209.

FXB G-11 is reserved every day exclusively for the Summer Program from 8:00am to 6:00pm except Tuesday, June 16 Kresge 209 is reserved every day exclusively for the Summer Program from 3:00pm to 5:00pm, except June 2-June 5

WEEK ONE		
Saturday, May 30	3:00 – 6:00 pm MCPHS	Summer Program Participants will arrive throughout the early afternoon and familiarize themselves with the residential hall at Massachusetts College of Pharmacy & Health Sciences (MCPHS).
	6:15 pm MCPHS, 3rd floor lounge, Matricaria Hall	Residential Hall Orientation at Mass College of Pharmacy and Health Sciences (Residence Hall Advisor who is on duty)
	7:00 pm	Welcome Dinner: California Pizza Kitchen Address: Prudential Center (Green "E" Line, T Stop "Prudential") Phone: 617-247-0888
Sunday, May 31	10:00 am	Museum of Science with free passes Take the green line outbound to "Science Park" T stop Schedule for the day available at: <u>http://www.mos.org/visitor_info/daily_schedule?dt=1243785600</u>
	12:30 pm	Lunch at Cheesecake Factory, Galleria
Monday, June 1	8:30 am Kresge Security Desk	Pictures for IDs taken at HSPH ID Office, near Kresge Security Desk
	9:00 am – 10:15 am Biostatistics 2-426	Breakfast: Program Introduction and Overview/Stipend Disbursement Dr. Rebecca Betenksy, Dr. Andres Houseman, Catherine Haskell
	10:00 am 10:30 am MCPHS, 4 th floor	Pictures for MCPHS IDs Sara Hummel, Area Coordinator, will meet you near the elevators on the 4th floor of the Matricaria building and bring you to the Technology Center for ID photos
	10:30 am – 11:00 am 4 th floor lobby atrium area	Summer Program student photos taken in Biostats
	11:30 am – 12:30 pm Biostatistics 2-426	Project Option Presentations Student Mentors Introduction
		Dr. Christoph Lange and Peter Lipman: Genetic Determinants of Alcoholism Dr. Tianxi Cai and Alisa Stephens: Assessing Associations Using Electronic Medical Data Dr. Eric Tchetgen and Caroline Jeffrey: Evaluating gene-environment interaction between oral contraceptive use and BRCA1/BRCA2 mutation on the risk of ovarian cancer
	12:30 – 1:30 pm	Lunch (Lunch will take place around 12-1:00 or 1:30 daily)
	To read for class tomorrow	Homework Assignment : Read the article "PC Versus Mac: An Exploration of the Computer Preferences of Harvard Students". The article will be discussed during the first lecture of the course

Tuesday, June 2	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics Instructor: Dr. Andrés Houseman Adjunct Assistant Professor, HSPH Biostatistics HSPH Biostatistics Alumni Introduction to Biostatistics The material in this course will be covered over a 4-week period. This class will take place each morning from 9:00 am – 11:00am, unless noted otherwise. Introduction to Biostatistics acquaints the student with the basic concepts and methods of biostatistics, their applications, and their interpretation. The material covered includes data presentation, numerical summary measures, rates and standardization, and life tables. Probability is introduced to quantify uncertainty, especially as it pertains to diagnostic and screening methods. Also covered are sampling distributions so that students may be introduced to confidence intervals and hypothesis testing. The computer is used throughout the course, and the student will gain familiarity with the software package STATA.
	11:30 am – 12:30 pm	Possible one-to-one meeting between summer students and mentors to start working on Research Projects
	12:30 – 1:30 pm	Lunch – possible time for meeting between summer students and mentors to start working on Research Projects
	1:30 – 3:00 pm Biostatistics 2-426	Biostatistics Lecture: Dr. Victor De Gruttola "Biostatistics and HIV/AIDS research"
Wednesday June 3	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics
	12:00 – 1:30 pm Biostatistics 2-426	Catered lunch with Biostatistics students
	1:30 – 3:00 pm Biostatistics 2-426	Biostatistics Lecture: Dr. Armin Schwartzman, Assistant Professor of Biostatistics, Dept. of Biostatistics Biostatistics "High dimensional data: genomics, imaging, and more"
	3:00 – 4:00 pm Kresge LL10	STATA class: Getting started with STATA Kathleen Wirth, Graduate Student, Epidemiology, and STATA expert
Thursday June 4	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics
	12:00 – 1:30 pm	Lunch
	2:30 – 5:00 pm	HSPH Graduation Ceremony – no other events planned
		Students are strongly encouraged to attend the ceremony and hear the 2009 speaker Dr. Atul Gawande
		The Harvard School of Public Health is pleased to announce that Dr. Atul Gawande, associate professor, surgeon, and celebrated author, has agreed to be the School's Commencement speaker on June 4, 2009.
		Atul Gawande is a general and endocrine surgeon at Brigham and Women's Hospital and the Dana- Farber Cancer Institute. He received his MPH from HSPH in 1999 and is currently an Associate Professor in the Department of Health Policy and Management and an Associate Professor of Surgery at HMS. His research has concentrated on strategies to improve medical performance and public health. He became director of the World Health Organization's global campaign to reduce surgical deaths in 2007.
		Dr. Gawande served as a senior health policy advisor in the Clinton presidential campaign and White House from 1992 to 1993. He has been a staff writer for the New Yorker magazine since 1998. In 2006, Dr. Gawande received a MacArthur Award for his research and writing.
		His nonfiction writing has been selected to appear in the annual Best American Essays collection three times and in Best American Science Writing seven of the last eight years. His book Complications: A Surgeon's Notes on an Imperfect Science was a finalist for the National Book Award in 2002 and has been published in more than twenty languages. His most recent book, Better: A Surgeon's Notes on Performance, was a New York Times bestseller and was selected as one of the ten best books of 2007 by Amazon.com and the Sunday Times of London.

	6:00 pm	Suggestion: The new Institute of Contemporary Art, <u>http://www.icaboston.org/</u> FREE from 5:00 – 9:00 pm on Thursdays and Harvard ID holders! 100 Northern Avenue, Boston's waterfront MBTA directions: Take the Red Line to South Station. At South Station take the Silver Line to the World Trade Center stop. Exit left onto Congress Street. Walk one block to the corner of B Street and turn right, crossing Congress Street. Follow B Street for one block. At the corner of B Street and Seaport Boulevard cross the street and turn left. At the next corner, turn right onto Northern Avenue. The ICA is on the right. You will pass the entrance to Anthony's Pier 4 and two parking lots before coming to the driveway leading to the ICA entrance.
Friday June 5	9:30 – 11:30 am FXB G-11 11:30 – 1:00 pm Biostatistics 2 - 426 4:00 pm – 6:00 pm	Introduction to Biostatistics Catered Lunch and lecture with Dr. Greg Connolly, Director, Division of Public Health Practice and Professor, Society, Human Development and Health Dept. Using research to make smoking history: how we use secondary analysis of existing data sets to produce reports on current tobacco control issues and based on the data, craft a health communications campaign and promote policy change Biostatistics department Pizza Party
Saturday June 6	Biostatistics 2 - 426 (Free day except for the dinner)	Suggested optional activities: Tour of Harvard Campus, Harvard Square: 2:00 pm Tours start at 1350 Massachusetts Avenue, Center of Holyoke Center Arcade <u>http://www.harvard.edu/siteguide/faqs/faq18.php</u>
		Harvard Peabody Museum of Archaeology and Ethnology, Harvard Square Free with Harvard ID Open 9:00 am – 5:00 pm daily, 11 Divinity Avenue, near Harvard Square Other Harvard Museums listed at: http://www.harvard.edu/museums/
	6:00 pm	Dinner at Bombay Club, Harvard Square 57 JFK Street, Cambridge, MA 02138 http://www.bombayclub.com/home.html
Sunday June 7	9:30 am	Meeting at the Hatch Shell for the Boston AIDS Walk
	10:00 am – 1:00 pm	Boston AIDS Walk
	1:00pm after walk	Lunch at Figs, 42 Charles Street

WEEK TWO			
Monday	9:30 – 11:30 am	Introduction to Biostatistics	
June 8	FXB G-11 12:00 – 12:30 pm	Lunch	
	12:30 – 1:30 pm	Genotyping Lab Tour	
	221 Longwood Avenue	Brigham & Women's Hospital Channing Laboratory	
	1:30 – 3:00 pm Biostatistics 2-426	Epidemiology Lecture: Dr. Sonia Hernández-Diaz Associate Professor of Epidemiology, Department of Epidemiology	
	3:30 – 5:00 pm	"Study Designs" STATA class: General lab	
	Kresge 209	Kathleen Wirth, Graduate Student, Epidemiology	
Tuesday	9:30 – 11:30 am	Introduction to Biostatistics	
June 9	FXB G-11 12:00 – 1:30 pm Biostatistics 2-426	Catered lunch with Dept. of Biostatistics faculty	
	1:30 – 3:00 pm	Lecture: Dan Milner, MD	
	Biostatistics 2-426	Pathologist, Brigham & Women's Hospital Assistant Professor of Pathology, Harvard Medical School	
		Adjunct Lecturer, Harvard School of Public Health "Global Health Perspective: Infectious Diseases"	
Wednesday June 10	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics	
	12:00 – 1:30 pm Biostatistics 2-426	Catered lunch with Dept. of Epidemiology students & faculty	
	1:30 – 3:00 pm Biostatistic 2-426	Dr. Jane Burns , Research Associate, Department of Environmental Health "How to Read a Research Paper"	
	3:00 – 4:30 pm	ONLINE Human Subjects Training	
		This training fulfills NIH's requirements for human subjects protection training. It includes the history, definitions, ethical principles, informed consent, regulations, and federal assurance of compliance topics regarding human subject research. You should get a certificate of completion at the end.	
		Here is the link to the Harvard Ethics Training in Human Research online training: https://hethr.harvard.edu/HethrLogin.jsp	
		Since most of you don't have Harvard ID numbers, you can click on the Register button on the bottom right, under "New Users without HUID" and go from there.	
	6:00 pm – 9:00 pm	Suggestion: The Museum of Fine Art, 465 Huntington Avenue (10 minute walk) FREE to all on Wednesdays, from 4:00pm – 9:45pm	
Thursday June 11	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics	
	12:00 pm – 1:30 pm Biostatistics 2-426	Catered lunch with Dept. of Society, Human Development and Health students & faculty	
	1:30 pm – 3:00 pm Biostatistics 2-426	Biostatistics Lecture: Dr. Jonathan Levy, Mark and Catherine Winkler Associate Professor of Environmental Health and Risk Assessment, Department of Environmental Health and Department of Health Policy and Management "Air Pollution Assessment"	
	3:30 – 5:00 pm Kresge 209	STATA class: Hypothesis Testing Kathleen Wirth, Graduate Student, Epidemiology	
Friday June 12	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics	
	11:30 – 1:00 pm	Lunch	
	1:00 – 2:30 pm 3:30 – 5:00 pm	Dr. Sebastian Schneeweiss, MD, ScD Associate Professor of Medicine and Epidemiology, Harvard Medical School Vice Chief, Division of Pharmacoepidemiology and Pharmacoeconomics Dept. of Medicine, Brigham and Women's Hospital TBA STATA class: General lab	
	3:30 – 5:00 pm Kresge 209	Kathleen Wirth, Graduate Student, Epidemiology	

Saturday June 13		FREE DAY Suggestion #1: Black Heritage Trail http://www.nps.gov/boaf/historyculture/places.htm The Black Heritage Trail explores the history of the 19th century free Black community of Boston. The trail consists of 14 sites and begins at the Robert Gould Shaw Memorial on Beacon Street. Ranger guided tours of the Black Heritage Trail are conducted as follows: Monday-Saturday; 10:00 a.m., 12:00 p.m., 2:00 p.m.; for groups of 5 people or more, please call 24 hours in advance for reservations: 617-742-5415. Suggestion #2: 30th Annual Cambridge River Festival 12 Noon - 6pm (rain or shine)! Bring your friends and family to this FREE, one-day celebration of the arts along the banks of the Charles River. Experience a wide array of Cambridge-based visual and performing arts. Browse through an arts & crafts market of over 150 vendors and feast on a grand assortment of international foods. Engage in interactive artist workshops, demonstrations, and family-oriented, hands-on, art-making activities.
Sunday June 14	11:15 am (meet at 11:15 am at Boylson T Stop above ground (Green line)	Dim Sum at Chau Chow City 83 Essex St. (between Chauncy and Oxford St.) Boston MA 02111, Tel: 617-338-8158 Located in the heart of Chinatown, this acclaimed restaurant has become synonymous with dim sum, offering a breathtaking variety of Chinese delicacies. Harried servers are constantly in motion, pushing rickety carts of dim sum past curious onlookers.
	1:00 pm	New England Aquarium Central Wharf Boston (617) 973-5205 Within its compact exhibit space, the Aquarium shows off everything from a lumbering, 500-pound sea turtle to the ghostly swirl of jellyfish just inside the front entrance. Flap your wings at the African and rockhopper penguins basking in the floodlights, and welcome the little blue penguins recently added to the renovated exhibit. The little blues, the smallest of the world's 17 penguin species, are a noisy little bunch. http://www.nea.com
	4:00 pm	Harbor Tour with Mass Bay Lines Tours Depart Rowes Wharf on the hour Daily 12:00pm – 5:00pm

WEEK THREE			
Monday June 15	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics	
Julie 15	11:30 am – 12:30 pm	Applying to the Harvard School of Public Health	
	Biostatistics 2-426	Kerri Noonan, HSPH Admissions Office Dr. David Wypij, Professor, Dept. of Biostatistics Michele Brooks, Academic Services Coordinator, Dept. of Society, Human Development and Health Joann Alexander, Academic Coordinator, Dept. of Epidemiology	
	12:30 pm – 2:00 pm Biostatistics 2-426	Catered Lunch and Lecture: Dr. George Seage, Associate Professor of Epidemiology, Department of Epidemiology; Director, HSPH Program in the Epidemiology of Infectious Diseases "Use of case-crossover designs in understanding and possible preventing HIV related risk behaviors"	
	3:30 – 5:00 pm Kresge 209	STATA class: Linear regression & Logistic regression Kathleen Wirth, Graduate Student, Epidemiology	
Tuesday June 16	9:30 – 11:30 am Biostatistics 2-426	Introduction to Biostatistics—Please note room change for today only!	
Julie To	12:00 – 1:30 pm Biostatistics 2-426	Lunch	
	1:30 – 3:00 pm Biostatistics 2-426	Lecture: Dr. Douglas Dockery, Chair, Department of Environmental Health Professor of Environmental Epidemiology; Department of Environmental Health & Department of Epidemiology "Air Pollution in Boston"	
	4:00 – 8:00 pm	Community Servings	
		Community Servings is dedicated to providing free home-delivered meals throughout eastern Massachusetts to people homebound with HIV/AIDS and other acute life-threatening illnesses, who are unable to shop or cook for themselves. We provide our clients, their dependent families, and caregivers appealing, nutritious meals, reaching out to those in greatest need. Our goals are to help our clients maintain their health and dignity, provide nutritionally and culturally appropriate meals, preserve the integrity of their family, and send the message that someone cares.	
		Our clients come from very diverse backgrounds and represent many different ethnicities. 95%, however, are living in poverty. 58% are men, 42% are women. 71% of our meals go to people of color, including African-American, Latino, Haitian, and Cape Verdean clients. Children receive 33% of our meals, and 80% of their caregivers are single parents.	
		http://www.servings.org/; Phone: (617) 522-7777; 18 Marbury Terrace, Jamaica Plain, MA 02130	
		MBTA Directions: From the Orange Line Stoney Brook Station: From T stop, proceed left, when you reach the first gateway turn left. Walk 200 yards down path, past Legal Services Building on you right. Our building is the next building on the right with a green bottom and white top. When you reach the skating rink, proceed to the right onto Marbury Terrace and the building is on your right.	
Wednesday	9:30 – 11:30 am	Introduction to Biostatistics	
June 17	FXB G-11 12:00-1:30 pm Biostatistics 2-426	Catered lunch and lecture Opportunities for undergraduate and graduate studies: with Dr. Renee Johnson, Visiting Scientist, Harvard Injury Control Center, Dr. Rebecca Betensky, and Catherine Haskell	
		 Conferences for Minority Students Summer Internship Graduate Schools Funding Possibilities 	
	1:30 – 3:00 pm Biostatistics 2-426	Lecture: Peter Kraft, Associate Professor of Epidemiology, Department of Epidemiology & Department of Biostatistics "Finding Genetic Determinants of Complex Traits - and what to do with them"	
	3:30 – 5:00 pm Kresge 209	STATA class: Linear regression & Logistic regression Kathleen Wirth, Graduate Student, Epidemiology	
Thursday June 18	9:30 – 11:30 am FXB G-11	Introduction to Biostatistics	
June 10	12:00 pm – 1:30 pm Biostatistics 2-426	Catered Lunch and Society, Human Development and Health Lecture: Dr. Binta Beard Discussion of Social Determinants & Health	

	3:00 pm Kaplan Test Prep and Admissions 39 JFK St Cambridge, MA 02138 (Harvard Square T stop)	 GRE Practice Exam – Paper and Pencil Test and Feedback Session Kaplan Educational Center is one of the nation's premier education companies providing students with a full range of resources to achieve their educational goals. During this time, Kaplan will provide you with an opportunity to prepare for GRE testing. Students will take a practice exam administered under simulated testing conditions and find out their scores on their exam. The practice test will be 2 sections, Verbal: 30 minutes, and Math: 45 minutes, total of only 75 minutes (no writing assessment essay and no experimental section), and then there will be a feedback session after lunch. Kevin.Richard@kaplan.com; phone: 617-661-6965 PIZZA will be served after test, during the feedback session.
Friday June 19	9:30 – 11:30 am FXB G-11 11:30 am – 1:30 pm FXB G-11	Introduction to Biostatistics Catered Lunch with the Movie "A Civil Action" "A Civil Action" focuses on a liability lawsuit filed by eight Woburn families against Beatrice Foods and W. R. Grace. These corporations were accused of dumping chemicals (especially trichlo roethylene, a probable human carcinogen) in ways that allowed the compounds to reach the water in Woburn, MA. In the end, both companies agreed to finance an expensive cleanup plan, Grace pleaded guilty to two felony counts of lying to the Government about what happened, and Beatrice's lawyers were judged to have engaged in misconduct. Harvard biostatisticians Dr. Stephen Lagakos and Dr. Marvin Zelen consulted on this case. 112 minutes.
	1:30 – 3:00 pm Biostatistics 2-426	Epidemiology/Nutrition Lecture: Dr. Walter Willett, Chair, Department of Nutrition Fredrick John Stare Professor of Epidemiology and Nutrition Department of Nutrition & Department of Epidemiology "Nutrition and Health: The Search for Veritas"
	4:30 - 6:00 pm Biostatistics 2-426	Dept. of Biostatistics Pizza party
	At SUNSET (around 8:30pm)	Suggestion: WBZ Free Friday Flicks Boston, Hatch Shell at the Redline T stop Charles MGH http://www.mass.gov/dcr/hatch_events.htm
Saturday June 20	11:00 am – 5:00 pm	Boston Common—Life is Good Festival
Sunday		http://www.lifeisgood.com/festivals/2009-festivals-locations/boston-festival.aspx Cost: Free Life is good is on a mission to spread much-needed good vibes nationwide in 2009. We're calling all optimists to join us on our favorite playground, Boston Common, on June 20, 2009 from 11am to 5pm, for a free, day-long family-friendly festival. Our outdoor bash features fantastic live music from Grammy winners The Blind Boys of Alabama, rising national recording artist Brett Dennen, and family-favorite SteveSongs. As always, there will be heaps of classic backyard food and a colorful mix of good-time games and activities for all ages. From seed spitting and Double Dutch to soccer kicks, tug-o'-wars and football flings, we promise a day of big smiles and healthy play. All funds raised through donations onsite and all profits from the sale of Life is good merchandise at the event will be directed via the Life is good Kids Foundation to Project Joy, a grassroots nonprofit that uses the power of play to heal and strengthen children whose lives have been deeply impacted by fear and trauma. Their mission: to ensure that nothing (not poverty, not violence, not natural disasters) destroys the playfulness of children. Nothing. The festival also features a high-energy fundraising walk, called the Good Walk for Kids, a 3-mile family- friendly route that can't be beat. You'll start at Boston Common, walk along the new Rose Kennedy Greenway to see it all in bloom, stroll along the Harbor Walk with beautiful ocean views, and return to the Common. We'll inject some surprises and fun along the way to keep your stride steady and your smile wide. Your heart will be joyful too, knowing that you are making a world of difference for many of Greater Boston's most vulnerable children. Now more than ever, a growing number of children who have been hurt by violence, poverty, and loss need our help.

WEEK FOUR		
Monday June 22	9:30 <i>–</i> 11:30 am FXB G-11	Introduction to Biostatistics—TBA
	12:00 – 1:20 pm 35 Wigglesworth St. 2 nd floor	Catered Lunch with Office of Diversity, Director Dale Trevino and Director of Yerby Fellowship Program, Betty Johnson
	1:30 – 3:00 pm Biostatistics 2-426	Lecture: Dr. Marvin Zelen, Professor of Biostatistics TBA; and comment on "A Civil Action"
	3:30 – 5:00 pm Kresge 209	STATA class: General lab Kathleen Wirth, Graduate Student, Epidemiology
Tuesday June 23	9:00 –12:00 pm	Time to work on presentations
	12:00 – 1:30 pm Biostatistics 2-426	Catered lunch with Dept. of Environmental Health faculty and staff
	1:30 – 3:00 pm Biostatistics 2-426	Lecture: Dr. Musie Ghebremichael, Research Scientist, Department of Biostatistics, HSPH and Dana Farber Cancer Institute High-risk behaviors and sexually transmitted infections in women in sub-Saharan Africa
	5:30 – 7:30 pm Courtyard Café in the Warren Alpert Building, 200 Longwood Avenue	Harvard Medical School, Office of Diversity and Community Partnership Dinner The dinner is for rising college students and college students in the summer programs
Wednesday June 24	10:00 am – 11:00 am Kresge 439	Meeting with IMSD Advisory Council Meeting; students will give informal presentations to the meeting attendees. This meeting is organized by the Dept. of Society, Human Development, and Health, who took over the IMSD (initiatives for maximizing diversity) grant from the Dept. of Biostatistics in Feb. 2009. The grant funds under-represented doctoral students at HSPH in several departments.
- 	12:00 pm – 3:00 pm	Time to work on final presentations
Thursday, June 25	10:30 pm – 1:00 pm Biostatistics 2-426	Project Presentation Rehearsal **Required**
	1:00 – 2:00 pm	Lunch
	3:00 pm—4:00 pm Kresge cafeteria	HSPH Scoopfest 2009 : Join other HSPH staff and faculty for some summertime fun! Various flavors of ice cream and toppings Hill be served by our Deans in the Kresge Cafeteria
Friday, June 26	9:00 am – 12:00 pm Biostatistics 2-426	Summer Program in Biostatistics Project Presentations Each Student will have approximately 20 minutes for presentations and 10 minutes for Questions and Answers. Faculty, mentors, and graduate students are expected to attend the presentations.
	12:00 – 1:00 pm	Lunch
	1:00 pm – 2:00 pm Biostatistics 2-426	Certificate Presentations Stan Hudson, Associate Dean for Student Services Harvard School of Public Health
Saturday, June 27	6:00pm	Farewell Dinner: Redbones (Redline, T Stop "Davis Square") 55 Chester Street, Somerville, MA 617-628-2200
Sunday, June 28		STUDENTS TRAVEL HOME