The 5th Annual Health Econometrics Workshop

October 3 — 5, 2013

Carolina Inn University of North Carolina, Chapel Hill



The Annual Health Econometrics Workshop

The annual health econometrics workshop (AHEW) provides a forum to discuss the use of econometric and other quantitative methods to address issues in health economics and policy, health services research, and outcomes research. It is the first series of meetings of its kind in North America and facilitates the exchange of ideas among the growing health econometrics community.

The format of the workshop will follow the traditional structure of the American Health Economics Conference (AHEC), National Bureau of Economic Research (NBER) Conferences, and the European Workshops on Econometrics and Health Economics (i) a nominated discussant presents and appraises the paper, (ii) the author(s) responds, and (iii) open discussion follows. Each paper will be allotted one hour.

The workshop has limited capacity but is open to all. If interested, please register at www.healtheconometrics.org

Welcome to the 2013 (5th) Annual Health Econometrics Workshop. The workshop will be held at the Carolina Inn, University of North Carolina, Chapel Hill NC from Oct 3 – 5, 2013. After a great response to and success in the last four workshops, we received forty seven highly qualified papers this year. Due to time constraints, we were able to include only 9 papers in the program. We would like to thank our discussants for taking the time to present these papers at the workshop. Their insights into the econometric issues are the highlight of the program. We also thank Professor Edward Vytlacil of New York University for agreeing to deliver the key-note speech of the conference.

We gratefully acknowledge the support of our sponsors, Agency for Healthcare Research and Quality (AHRQ), Pfizer Inc, UNC-Chapel Hill and the University of Washington, School of Public Health, without whom this conference would not be possible.

We hope you will find the workshop stimulating. See you all in October!

Organizing Committee

Anirban Basu, University of Washington, Seattle Partha Deb, Hunter College, CUNY **Donna Gilleskie**, UNC- Chapel Hill (Local Chair) Paul Grootendorst, University of Toronto Willard Manning, University of Chicago John Mullahy, University of Wisconsin-Madison Edward Norton, University of Michigan









Thursday, October 3, 2013

6:00-9:00: Informal get-together and dinner (on your own)

(logistics will be distributed later)

Friday, October 4, 2013

7:30 - 8:30 AM : Breakfast and Welcome

8:30 - 9:30 AM : Paper # 1, Randy Ellis discusses Cronin

9:30 - 10:30 AM : Paper # 2, Wayne-Roy Gayle discusses Matsumoto

10:30 - 11:00 AM : Coffee Break

11:00 - 12:00 PM: Paper # 3, Santos Silva discusses Smith

12:00 - 1:00 PM : LUNCH

1:00 - 2:00 PM : Paper # 4, Steven Stern discusses McManus et al.

2:00 - 3:00 PM : Paper # 5, Jennifer Kohn discusses Doyle et al.

3:00 - 3:30 PM : Coffee Break

3:30 - 5:00 PM : Keynote Speech by Prof. Edward Vytlacil

7:00 - 10:00 PM : Social Event at The Carolina Inn

Saturday, October 5, 2013

7:30 - 8:30 AM : Breakfast

8:30 - 9:30 AM : Paper # 6, Partha Deb discusses Banerjee et al.

9:30 - 10:30 AM : Paper # 7, Bart Hamilton discusses McGovern

10:30 - 11:00 AM : Coffee Break

11:00 - 12:00 PM: Paper # 8, Steven Lehrer discusses Biroli

12:00 - 1:00 PM : Paper # 9, Andrew Ching discusses Yin

1:00 PM : BOX LUNCH

2:00 PM : Adjourn

(All papers will be available for download at the conference website: www.healtheconometrics.org)



Friday, October 4, 2013 3:30 - 5:00 PM**Edward Vytlacil, PhD** New York University New York NY, USA

THE ROLE OF INDIVIDUAL HETEROGENEITY IN TREATMENT EFFECT ANALYSIS

This talk will discuss the implications for econometric analysis and empirical research of allowing for essential heterogeneity. Essential heterogeneity is when the effect of the treatment varies across observationally similar individuals, and individuals select into treatment based in part upon their own idiosyncratic treatment effect. Allowing for essential heterogeneity poses multiple challenges for econometric theory and empirical practice, raising questions as to the appropriate parameters of interest, challenging standard identification strategies, and changing the interpretation of the results of alternative estimators. The talk will focus on the implications of essential heterogeneity and testing for the presence of essential heterogeneity within the Marginal Treatment Effect framework. The talk will also discuss alternative restrictions on individual heterogeneity, both on individual heterogeneity of treatment effects and on individual heterogeneity of the selection process into treatment. For each alternative restriction on individual heterogeneity, the talk will analyze the implications of the restriction for instrumental variables estimation, and on how to test the restriction. Special emphasis will be placed on when it is appropriate to use various estimators in empirical practice. The talk will draw most heavily upon work by Heckman and Vytlacil, and by Machado, Shaikh and Vytlacil.

Prof. Edward Vytlacil **Department of Economics** New York University, NY

Edward Vytlacil received his PhD in Economics from the University of Chicago in 2000. He is currently a Professor of Economics at New York University, having previously been a faculty member at Stanford University, Columbia University, and Yale University. He is a Co-Editor of the Journal of Applied Econometrics, an Associate Editor for Econometrica and the Journal of Econometrics, and was formerly an Associate Editor of the Journal of Business, Economics and Statistics. Vytlacil's work has focused on the micro-econometric methodology for treatment effect and policy evaluation using disaggregate data. A theme in his work has been allowing for the effects of a treatment to vary across people, and allowing individuals to have some knowledge of their own idiosyncratic treatment effect and to act upon that knowledge. In addition to his work in econometric methodology, he has published empirical work in labor economics and health economics evaluating the returns to schooling, the returns to job training programs, and the effectiveness of medical interventions.

Friday, October 4, 2013

8:25 - 8:30 AM : Welcome

SESSION # 1 Chair—Anirban Basu, University of Washington, Seattle

 $8:30-9:30~\mathrm{AM}$: Annual health insurance decisions, uncertain health transitions, and within-year medical care consumption

<u>Discussant</u>: Randy Ellis, Boston University

Primary Author: Christopher J. Cronin, UNC-Chapel Hill

 $9:30-10:30~\mathrm{AM}$: Lighting the fires: explaining youth smoking initiation and experimentation in the context of a rational addiction model

<u>Discussant</u>: Wayne-Roy Gayle, University of Virginia <u>Primary Author</u>: Brett Matsumoto, UNC-Chapel Hill

10:30 - 11:00 AM : Coffee Break

SESSION # 2 Chair— Sally Stearns, UNC-Chapel Hill

11:00 - 12:00 PM : "BILLIONS AND BILLIONS SERVED" HETEROGENEOUS EFFECTS OF FOOD SOURCE ON CHILD DIETARY QUALITY

<u>Discussant</u>: João MC Santos Silva, University of Essex, UK <u>Primary Author</u>: Travis A. Smith, University of Minnesota

12:00 - 1:00 PM : LUNCH

SESSION # 3 Chair— Marisa Domino, UNC-Chapel Hill

 $1:00-2:00\ PM$: Treatment choices with insurance mandates: the CASE of IVF

Discussant: Steven Stern, New York University

Primary author: Brian McNamus, UNC-Chapel Hill

2:00 - 3:00 PM : MEASURING INVESTMENT IN HUMAN CAPITAL FORMATION: AN EXPERIMENTAL ANALYSIS OF EARLY LIFE OUTCOMES

Discussant: Jennifer Kohn, Drew University

Primary Author: Orla Doyle, University College Dublin

3:00 - 3:30 PM : Coffee Break

Friday, October 4, 2013 (Contd.)

SESSION # 5 Chair—Partha Deb, Hunter College, CUNY

3:30 - 5:00 PM : **KEY-NOTE SPEECH**

Speaker: EDWARD VYTLACIL, NEW YORK UNIVERSITY

Topic: THE ROLE OF INDIVIDUAL HETEROGENEITY IN TREATMENT EFFECT

ANALYSIS

7:00 - 10:00 PM: Social Event at Carolina Inn

Saturday, October 5, 2013

SESSION # 6 Chair— Pinka Chaterrji, SUNY, Albany

8:30 - 9:30 AM : Effects of psychiatric disorders on labor market

OUTCOMES: A LATENT VARIABLE APPROACH USING MULTIPLE CLINICAL INDICATORS

Discussant: Partha Deb, Hunter College, CUNY

Primary Author: Souvik Banerjee, State University of New York, Albany

$9:30-10:30~\mathrm{AM}$: using interviewer random effects to calculate unbasied HIV prevalence estimates in the presence of non-response: A Bayesian approach

Discussant: Barton Hamilton, Washington University at St. Louis

Primary Author: Mark E. McGovern, Harvard Center for Population and Development Studies

10:30 - 11:00 AM : Coffee Break

SESSION # 7 Chair—Donna Gilleskie, UNC-Chapel Hill

11:00 - 12:00 PM: GENE AND ECONOMIC INTERACTION: THE CASE OF OBESITY

<u>Discussant</u>: Steven Lehrer, Queen's University, Canadas <u>Primary Author</u>: Pietro Biroli, The University of Chicago

12:00 - 1:00 PM : PHARMACEUTICALS, INCREMEMENTAL INNOVATION AND MARKET EXCLUSIVITY

Discussant: Andrew Ching, University of Toronto

Primary Author: Nina Yin, Toulouse School of Economics

1:00 PM : BOX LUNCH 2:00 PM : ADJOURN **Lodging** All registered participants will be provided up to two nights (Oct 3 and 4) of accommodations at the workshop Hotel:



The CAROLINA INN (www.carolinainn.com)

located at **211 Pittsboro Street**, **Chapel Hill NC 27516** is listed on the National Register of Historic Places and a member of the prestigious National Trust's Historic Hotels of America.

Phone: +1.800.962.8519

Getting There Raleigh-Durham International Airport offers passengers a variety of transportation options, ranging from taxi and limousine service to rental cars. Our hotel is located approximately 15 minutes from the Raleigh-Durham International Airport.

Taxis Taxi service is available at both airport terminal exits. The Terminal A taxi dispatch booth is located on the curb near Southwest Airlines. The Terminal C dispatch booth is located on the curb on the terminal's lower level.

Limousine and Car Service Elite Coach Chauffeured Transportation: www.elitecoach.net or call (919) 267-5250

Directions from airport: Exit RDU airport onto I-40 W for 15.9 miles. At exit 273A, take ramp right for NC-54 West toward Chapel Hill. Bear right onto NC-54 at top of ramp. Take NC-54 W / Raleigh Rd for 3.5 miles. You will enter the UNC campus. Keep straight for 0.7 miles; the road name changes to South Rd. Turn right onto NC-86 N / S Columbia St. In 0.2 miles, turn left onto W Cameron Ave. In 0.1 miles, turn left onto Pittsboro St. The Carolina Inn entrance is on your left.

<u>http://www.carolinainn.com/chapel-hill-trip-planner.php</u> gives info about driving directions.

Social Event: Carolina Inn Backyard Friday October 4, 2013, 7-10 PM