

## CURRICULUM VITAE

**Yi (Yvonne) Huang**

### I. PERSONAL INFORMATION

Department of Mathematics and Statistics  
University of Maryland, Baltimore County  
1000 Hilltop Circle  
Baltimore, MD 21250  
**URL:** <http://www.math.umbc.edu/~yhuang>

**Phone:** (410) 455-8727  
**Fax:** (410) 455-1066  
**Email:** [yihuang@umbc.edu](mailto:yihuang@umbc.edu)

### II. EDUCATION

- 2007                      Ph.D., in Biostatistics.  
Johns Hopkins University  
(advisor: Dr. Karen Bandeen-Roche)  
**Thesis:** Statistical Methods for the Determination of Average  
Associational and Causal Effects.
- 2000                      M.S., in Atmospheric Science, Graduate Certificate in Statistics  
University of California, Los Angeles
- 1997                      B.S., **Summa Cum Laude** in Atmospheric Physics  
Peking University, Beijing, P.R. China

### III. POSITIONS & PROFESSIONAL EXPERIENCE

- 2007 – Now              **Assistant Professor**  
Department of Mathematics and Statistics,  
**University of Maryland, Baltimore County (UMBC)**
- Closely collaborate with Bloomberg School of Public Health of Johns Hopkins University, Erickson School of Aging Studies of UMBC, and School of Medicine of UMB.
- 2001 – 2006              **Biostatistics Core member**  
Center on Aging and Health, **Johns Hopkins University (JHU)**
- Direct statistical consultation on aging related projects with investigators, who primarily affiliated with NIA/NIH, JHSPH, and JHMI.
  - Develop, carry on, and present appropriate analysis, participate paper writing of method and result sections if applied.
- 2001 – 2003              **Research Assistant**  
Environmental Health Working Group, Biostatistics Dept., **JHU**
- Research on Bayesian hierarchical distributed lag models for

estimating an acute health effect associated with cumulative summer ozone exposure in recent days on mortality across 19 large U.S. cities, using NMMAPS (National Mortality Morbidity Air Pollution Study) data.

- 2002                    **Internship - Statistical Research Assistant**  
Division of Cancer Epidemiology and Genetics, **NCI, NIH.**
- Research areas: multiple comparison, clustering methods, genetic epidemiology, survival analysis, GLM.
- 2000 – 2005            **Consulting Biostatistician and Tutor**
- Client includes faculties from Johns Hopkins school of Nursing, medical staff and students from Johns Hopkins Medical Institutions, NIH, and medical institutions of University of Maryland.
  - Primary work - methods consultation for their projects.
- 1998 – 2000           **Research Assistant**  
Inst. of Environment, **UCLA**
- Urban Air Quality research, involving Wavelet analysis on the pollutants' association with mortality at Los Angeles basin.
  - Mechanism and health effect - particles' deposition in the lung.

#### **IV. AWARDS & HONORS**

- 2007                    **ADVANCE** Research Assistantship program Award at UMBC
- 2007                    Best Methodological Development Award of the Poster Competition at Biostatistics, Johns Hopkins Bloomberg School of Public Health.
- 2000 – 2006            Scholarships/Fellowships from Johns Hopkins University
- 2002                    Cancer Research Training Award, from NIH
- 1999 – 2000            Win **NASA** Graduate Student Fellowship in their Research Proposal Competition
- 1998 – 2000            Tuition Fellowship and Research Scholarships from UCLA.
- 1997                    Graduate with Summa Cum Laude, Peking University (top 1%)
- 1996                    Huikai Fellowship, Peking University
- 1995                    Baojie Fellowship, and  
Excellent Undergraduate Fellowship at Peking University
- 1992                    Award title: Outstanding Student of Beijing City, China.
- 1990                    Third Prize of National Mathematics Competition, at China

#### **V. EDITORIAL SERVICE**

- 2004 – Now.            Statistical Editorial Board Member of  
-- **the Internet Journal of Mental Health.**  
<http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijmh/front.xml>

## **VI. PROFESSIONAL MEMBERSHIP**

- 2002 – Member, International Biometric Society  
2005 – Member, American Statistical Association  
2006 – Member, Prevention Science and Methodology Group

## **VII. PUBLICATIONS**

### *Peer-reviewed Papers*

1. Leng, SX, **Huang, Y.**, Fried, LP (2007). Frailty and Molecular Inflammation in Older Adults. To appear in *Long-Term Care Interface*.
2. **Huang, Y.**, Dominici, F, and Bell, ML (2005). Bayesian Hierarchical Distributed Lag Models for Summer Ozone Exposure and Cardio-respiratory Mortality – *Environmetrics*, July, Issue 5, Vol 16: 547-562.
3. Leng, SX, Xue, QL, **Huang, Y.**, Semba, R, Chaves, P, Bandeen-Roche, K, Fried, LP. And Walston, JD. (2005). Total and Differential White Blood Cell Counts and Their Associations with Circulating Interleukin-6 Levels in Community-dwelling Older Women – *Journal of Gerontology: Medical Sciences*, Vol 60A, No.2: 195-199.
4. Leng, SX, Xue, QL, **Huang, Y.**, Bandeen-Roche, K, Ferrucci, L, Fried, LP. And Walston, JD. (2005). Baseline Total and Specific Differential White Blood Cell Counts and 5-year All-Cause Mortality in Community-dwelling Older Women. To appear in *Experimental Gerontology*.
5. Rosenberg, PS, **Huang, Y.**, and Alter, BP (2004). Individualized Risks of First Adverse Events in Patients with Fanconi Anemia – *Blood, Journal of the American Society of Hematology*, 15 July, Vol 104, No. 2: 350-355.
6. Haisfield-Wolfe, ME, Schoenberg, M, Welch, J., and **Huang, Y.** (2004). Improving the Quality of Continence for Bladder Cancer Patients Recovering after a Cystectomy With Neobladder Reconstruction – *Oncology Nursing Forum*, Vol 31, No. 2: 412.

### *Manuscripts*

7. **Huang, Y.**, Bandeen-Roche, K, and Frangakis, CE (2007). Average Causal Effects (ACE) on Binary Outcomes: Measures and Selection, Collapsibility, Estimation by Propensity Score Subclassification. (*To be submitted*)
8. Bandeen-Roche, K, Walston, JD, **Huang, Y.**, Semba R, and Ferrucci, L (2007). Measuring Systemic Inflammatory Regulation in Older Adults: Evidence and Utility. (*In preparation*)

9. **Huang, Y.**, Bandeen-Roche, K (2007). Average Causal Effects (ACE) Estimation Allowing Covariate Measurement Error: A Finite Mixture Modeling Framework. (*In preparation*)
10. Quiroz, L.H., et al (**Huang, Y.**) (2007). Elective Cesarean Delivery: Is there a short-term benefit for mothers and babies? (*In preparation*)

***Peer-reviewed Proposals & Monographs***

11. **Huang, Y.** and Turco R. (1999). Win “NASA Graduate Fellowship” award in their national Research Proposal Competition – Numeric model on large-scale interactions between aerosol and cloud.
12. **Huang, Y.** (2007). Statistical Methods for the Determination of Average Associational and Causal Effects. (Ph.D thesis)
13. **Huang, Y.** (1997). The correlation among long-term changes of meteorological variables – data analysis using Wavelet analysis. (B.S. thesis)

**VIII. PRESENTATIONS AND POSTERS**

1. “Average Causal Effects Estimation Allowing Covariate Measurement Error: A Finite Mixture Modeling Framework”, **invited seminar**, in Department of Mathematics and Statistics, UMBC (Baltimore, MD, Apr. 2007).
2. “Average Causal Effects (ACE) Estimation Allowing Covariate Measurement Error: A Finite Mixture Modeling Framework”, **poster with award** –“Best Methodological Development”- at the Poster Competition of Biostatistics, under 2007 Delta Omega Poster Competition at Johns Hopkins University, Delta Omega Public Health Honor Society (Baltimore, MD, Mar. 2007).
3. “Average Causal Effects on Binary Outcomes: Measures, Selection, Collapsibility, and Estimation by Propensity Score Subclassification”, **invited seminars**, at
  - University of Pennsylvania, Department of Biostatistics and Epidemiology and Center for Clinical Epidemiology and Biostatistics (CCEB). (Feb. 2006)
  - University of Maryland, Baltimore County, Department of Mathematics and Statistics. (Mar. 2006)
  - National Heart, Lung, and Blood Institution (NHLBI, NIH), the Office of Biostatistics Research (OBR). (Apr. 2006)
4. “Selection of Average Causal Effects Measures for Binary Outcomes Using Propensity Score Subclassification”, contributed talk in ENAR conference (Tampa, FL, Mar. 2006).

5. “Selection of Average Causal Effects Measures for Binary Outcomes Using Propensity Score Subclassification”, **invited seminar**, at The Peter Lamy Center for Drug Therapy and Aging, School of Pharmacy, University of Maryland, Baltimore (UMB). (Mar. 2006)
6. “Average Causal Effects on Binary Outcomes: Measures and Selection, Collapsibility, Estimation by Propensity Score Subclassification”, **invited talk**, in Prevention Science & Methodology Group (<http://psmg.usf.edu/>, Feb. 2006).
7. “Analysis of Multiple Discrete Surrogates – Methods Review, especially Latent Class Regression”, with discussion – Egleston, B. Talk in Survival, Longitudinal and Multivariate Data Working Group (Johns Hopkins University, Jan. 2006).
8. “Different Measures of Average Treatment Effect on Binary Outcome, Estimated by Propensity Scoring”, contributed talk in ENAR conference (Auston, TX, Mar. 2005).
9. “Average Causal Effect (ACE) on Binary Outcomes: Measures, Collapsibility, Estimation by Propensity Score Subclassification”, poster in departmental retreat. (Hershey, Penn, Apr. 2005)
10. “Breathing the bad air or not? Ozone effect on Mortality – a multi-site time-series study”, poster in departmental retreat. (Ocean city, MD, Jun. 2003)
11. “Summer ozone and mortality in 20 U.S. cities”, contributed talk in ENAR conference (Arlington, VA, Mar. 2002).

## **IX. RESEARCH GRANT PARTICIPATION**

2007	Statistician, NIH, .... ?? %, “Exposure Assessment”, PI: Dr. Thomas Mathew. Direct Cost: ....
2007	Biostatistician, NIH, .... ??%, “....”, PI: Dr. John G. Schumacher....
2007	Biostatistician, PI: Dr. Jessica Kelley-Moore, Florida dataset Biostatistician, PI: Dr. Jessica Kelley-Moore, Assistant living project

## **X. TEACHING EXPERIENCE**

### **Instructor, UMBC**

2007 - 2008	Biostatistical Principle and Design: 619 Quantitative Methods for Medical and Aging Research: 620
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### **Teaching Assistant / Lab Instructor, JHU**

2004 - 2005	Introduction to Statistical Theory I & II: 140.673, 140.674 Statistical Methods in Public Health I & II: 140.621, 140.622
2003 - 2004	Analysis of Longitudinal Data : 140.655 Introduction to SAS statistical package: 140.632 Statistical reasoning in Public Health I & II: 140.611, 140.612
2002 – 2003	Introduction to Probability I & II: 140.671, 140.672 Introduction to Statistical Theory I & II: 140.673, 140.674
2001 - 2002	Statistical Methods in Public Health I - IV: 140.621 - 140.624
2000	<b>Teaching Assistant, UCLA</b> Introduction to Statistics and Probability. 100

**XI. ACADEMIC SERVICE**

2007	Organizing Committee member for “Probability and Statistics Day” at UMBC.
2007	Coordinator for biostatistics graduate program.