

# CURRICULUM VITAE

## YI HUANG

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### **EDUCATION:**

Ph.D.	2007	Johns Hopkins University, Bloomberg School of Public Health, <b>Ph.D.</b> in Biostatistics.
M.S.	2000	University of California, Los Angeles, <b>M.S.</b> in Atmospheric Science, Graduate Certificate in Statistics.
B.S.	1997	Peking University, P.R. China, <b>B.S.</b> in Atmospheric Physics, Summa Cum Laude.

### **EXPERIENCE IN HIGHER EDUCATION**

2015 – present	Univ. of Maryland, Baltimore County (UMBC), <b>Associate Professor</b> , Department of Mathematics and Statistics
2007 – 2015	Univ. of Maryland, Baltimore County (UMBC), <b>Assistant Professor</b> , Department of Mathematics and Statistics
2008 – present	Univ. of Maryland, Baltimore (UMB), School of Medicine, <b>Affiliated Assistant Professor</b> , Joint Doctoral Program in Gerontology, and Department of Preventive Medicine and Epidemiology.
2007 – 2012	U.S. Food and Drug Administration (FDA), <ul style="list-style-type: none"><li>• <b>Expert consultant</b> on statistical methodology, for the study team of Infant Feeding Practices Study (IFPS) II, a nationwide study jointly led by FDA, NIH, and CDC.</li><li>• <b>External Grant reviewer</b>, Office of Women's Health (OWH)</li></ul>
2009 – 2011	Hilltop Institution at UMBC, <b>Biostatistician</b> , health care policy research using Medicare and Medicaid data for Maryland state
2007 (Jan. – Aug.)	Center of Aging Studies, Erickson School of Aging Studies, UMBC, <b>Biostatistician</b> , policy and socio-cultural aging research for assisted living and long-term care.
2001 – 2006	Center on Aging and Health at Johns Hopkins University (JHU), <b>Biostatistics Core member</b> , statistical consultant (data analysis and manuscript writing) for investigators from NIA/NIH and JHMI.

- 2001 – 2003 Department of Biostatistics at JHU, **Research Assistant**, data analysis and method development for Environmental Health Working Group.
- 2002 National Cancer Institute, NIH, **Statistical Research Assistant**, summer internship, Division of Cancer Epidemiology and Genetics.
- 1998 – 2000 Institute of Environment, at Univ. of California, Los Angeles, **Research Assistant**, urban air quality research on the association between pollutants and mortality at Los Angeles basin.

### **HONORS RECEIVED**

- 09/2013 Joint press release by UVA and UMBC - 1<sup>st</sup> author paper on *JAMA Pediatrics*.
- 2009 Certificate of Appreciation - acknowledgement for outstanding service in proposal review, FDA Office of Women's Health.
- 2007 ADVANCE Special Research Initiation Award for women faculty in STEM field, UMBC
- 2007 Best Methodological Development Award of the Poster Competition at Biostatistics, Johns Hopkins Bloomberg School of Public Health.
- 2000 – 2006 Graduate Fellowships from Johns Hopkins University
- 2002 Cancer Research Training Award from NIH
- 1999 – 2000 Win NASA nationwide Research Proposal Competition and get Graduate Fellowship afterwards
- 1998 – 2000 Tuition Fellowship and Research Scholarships from UCLA.
- 1997 Graduating Summa Cum Laude, Peking University (top 1%)
- 1996 Huikai Fellowship for outstanding performance, Peking University
- 1995 Baojie Fellowship, and  
Excellent Undergraduate Student Fellowship at Peking University
- 1992 Award title: Outstanding Student of Beijing City, China.
- 1990 Third Prize of National Mathematics Competition, China

### **RESEARCH SUPPORT AND FELLOWSHIPS**

- 2015 – 2020 \$2,500,000 Submitted RO1 grant to National Institute of Mental Health, NIH, under review - *Comparative Effectiveness of Care Coordination on Pediatric Psychopharmacologic Outcomes*. (PI at UMB: Dr. Susan dosReis, School of Pharmacy, UMB)  
**PI at UMBC:** Yi Huang, amount = \$897,348
- 2014 – 2015 \$500,000 National Institute of Aging, NIH – *Baltimore Hip Fracture and CT studies*. (PI at UMB: Dr. Jay Magaziner, School of Medicine, UMB). **PI at UMBC** for my statistician role together with my graduate students, amount = \$77,289 (awarded)

2011 – 2012	\$55,000	U.S. Food and Drug Administration (FDA) - <i>Average Treatment Effect Estimation Accounting for Covariate Measurement Error – Method Extension and Software Development</i> . <b>Co-PI</b> on the grant awarded <b>2011</b> Critical Path RFP. (PI at FDA: Dr. Cunlin Wang, CDER). <b>PI at UMBC</b> , amount = \$50,000
2010 – 2011	\$55,000	U.S. Food and Drug Administration (FDA) - <i>Average Treatment Effect Estimation Accounting for Covariate Measurement Error - New causal model technique with a medical device application</i> . <b>Co-PI</b> on the grant awarded 2010 Critical Path RFP (PI at FDA: Dr. Cunlin Wang, CDRH) Grant # 00006582 <b>PI at UMBC</b> , Yi Huang, amount = \$50,000
2008 – 2010	\$320,172	State of Maryland & Robert Wood Johnson Foundation - <i>Changes in Health Care Financing and Organization (HCFO) initiative</i> (Grant # 63756, PI: Dr. Anthony M. Tucker). <b>Statistician</b> - Direct cost (DC) for my Statistical Consulting = \$18,000
2008	\$6000	Summer Faculty Fellowship, UMBC.
2007 – 2009	\$15,000	U.S. Food and Drug Administration (FDA) <b>PI for UMBC contract</b> - Expert statistical consultant on IFPS II study for manuscripts and proposals. (\$5000 per year)
2007	\$35,000	Two grants that I participated in 2007: <ul style="list-style-type: none"> <li>• NIH, <b>Statistician</b>, Exposure Assessment (PI at UMBC: Dr. Thomas Mathew)</li> <li>• NIH, <b>Statistician</b>, aging research for assisted living and long-term care (PI at UMBC: Dr. Kevin Eckert)</li> </ul>
2007	\$30,000	NSF, ADVANCE Special Research Initiation Award for female faculty in STEM (Grant # 0244880) (PI: Dr. Freeman Hrabowksi)
1999	\$50,000	NASA Graduate Fellowship after winning nationwide NASA Graduate Student Research Proposal Competition - <i>Numeric model on large-scale interactions between aerosol and cloud</i> (Advisor: Dr. Richard Turco, UCLA)

**PhD STUDENTS** (16: Chair and co-chair for 2 + committees for 14 others)

**Statistics Ph.D.**

- Elande Baro, 2011 – 2015, thesis advisor and chair, co-advised with Dr. Roy. She will defense in 07/2015.
- Shuyan Zhai, 2010 – 2015, thesis co-advisor (her primary advisor: Dr. Mathew)
- Wenxin Lu, 2013 – present, academic advisee and my research assistant
- Mingyu Xi, 2013 – present, committee member.
- Trang Pham, 2012 – present, academic advisee (leave absent now)

- Andrew Raim, graduated 04/2014, committee member.
- Sanatan Saraf, graduated 03/2013, committee member and thesis reviewer
- Mathangi Gopalakrishnan, graduated 12/2012, committee member
- Xiaoyu Dong, graduated 09/2011, committee member and thesis reviewer
- Elizabeth Stanwyck, graduated 12/2011, committee and thesis reviewer
- Martin Klein, graduated 05/2009, committee member
- Joseph D. Warfield, graduated 08/2008, committee member

#### **Ph.D. in Other Disciplines**

- Lynn Keimig (Epidemiology and Public Health, Gerontology Division, UMB), current (2011 – present), thesis committee.
- Nancy Chiles (Epidemiology and Public Health, Gerontology Division, UMB), graduated 08/2014, thesis committee (monthly research meeting, 2011-2014)
- Katherine Giuriceo (Epidemiology and Public Health, Gerontology Division, UMB), graduated 06/2011, thesis committee
- Jade N. Wolfman (Psychology), graduated 04/2009, thesis committee

#### **MASTER STUDENTS of Statistics (10)**

- Esther Ngan, graduated 05/2014, CAPSTONE Project advisor.
- Ginto Pottackal, 12/2011, CAPSTONE Project advisor (current Ph.D student)
- Shuyan Zhai, 12/2011, CAPSTONE Project advisor (current Ph.D student)
- Xiaosong Zhong, graduated 07/2011, CAPSTONE Project advisor (Current employed by private company as a federal contractor)
- Evelyn Rochelle Frazier, graduated 05/2011, MS thesis committee.
- Airong Yu, graduated 05/2010, CAPSTONE Project advisor (Current employed at Apple Company)
- Jin Sun, graduated 05/2010, CAPSTONE Project advisor (Current employed by Johns Hopkins Medical Institution)
- Chiguang Feng, graduated 12/2009, CAPSTONE Project advisor (Current employed by School of Medicine, University of Maryland)
- Xiaoshu Feng, graduated 05/2009, Academic advisor (Current employed by an international pharmaceutical company)
- Nicole Wood, graduated 05/2009, CAPSTONE Project advisor (Current employed by a research center at Florida)

#### **PUBLICATIONS** (S – graduate students at UMBC)

##### **Peer-Reviewed Works**

###### ***ARTICLES***

1. **Huang Y.**, Hauck FR, Signore C., Yu<sup>S</sup> A, Raju T., Huang T., and Fein SB. Influence of Bedsharing Activity on Breastfeeding Duration among US Mothers. *JAMA (Journal of American Medical Association) Pediatrics*, 2013;167(11):1038-1044. (Press release: joint press by UVA and UMBC, in Sep, 2013) doi:10.1001/jamapediatrics.2013.2632

2. Wang L., Wu F., Zhao L., Zhang H., Shen X., **Huang Y.**, Lao L. Patterns of Traditional Chinese Medicine Diagnosis in Thermal Laser Acupuncture Treatment of Knee Osteoarthritis, *Evidence-Based Complementary and Alternative Medicine*, Vol. 2013 (2013), Article ID 870305.
3. **Huang Y.**, Labiner-Wolfe J., Huang<sup>S</sup> H., Choiniere C., and Fein SB. Association of Health Profession and Direct-To-Consumer Marketing with Infant Formula Choice and Switching. *Birth*, Vol. 40, Issue 1, 24- 31, March, 2013 (DOI: 10.1111/birt.12025).
4. Meng<sup>S</sup> XZ, Wu F., Wei PW, Xiu LJ, Shi J., Pang B., Sun DZ, Qin ZF, **Huang Y.**, and Lao LX. A Chinese Herbal Formula to Improve General Psychological Status in Post-Traumatic Stress Disorder: A randomized placebo-controlled trial on Sichuan earthquake survivors. *Evidence-Based Complementary and Alternative Medicine*, Vol. 2012 (2012), Article ID 691258 (doi:10.1155/2012/691258).
5. Lao L., **Huang Y.**, Feng<sup>S</sup> C., Berman B., Tan M. Evaluating Traditional Chinese Medicine using Modern Clinical Trial Design and Statistical Methodology: Application to a Randomized Controlled Acupuncture Trial. *Statistics in Medicine*, 2012, Vol. 31, Iss.7: 619-627 (doi: 10.1002/sim.4003).
6. Chu H., Nie L., Chen Y., **Huang Y.**, and Sun W. Bivariate Random Effects Models for Meta-Analysis of Comparative Studies with Binary Outcomes: Methods for the Absolute Risk Difference and Relative Risk. *Statistical Methods for Medical Research*, 2012, Vol. 21, No. 6, 621 – 633.
7. Tucker A., Johnson K., **Huang Y.**, & Brewer T. Examining the Medicare Resource Use of Dually Eligible Medicaid Recipients. 2010, *Baltimore, MD: The Hilltop Institute, UMBC* (Report for Maryland State, Department of Health and Mental Hygiene). 120 pages report is available for download after Hilltop press release: <http://www.hilltopinstitute.org/publications/ExaminingtheMedicareResourceUseofDually-eligible-Recipients-January2010.pdf>.
8. Bandeen-Roche K, Walston JD, **Huang Y.**, Semba R, and Ferrucci L. Measuring Systemic Inflammatory Regulation in Older Adults: Evidence and Utility. *Rejuvenation Research*, 2009, 12(6): 403-10.
9. Leng SX, Xue QL, Tan J, **Huang Y.**, Yeh SH, and Fried LP. Associations of Neutrophil and Monocyte Counts with Frailty In community-dwelling Disabled Older Women: Results from the Women’s Health and Aging Studies I. *Experimental Gerontology*, 2009, Vol. 44, Iss.8: 511–516 (doi:10.1016/j.exger.2009.05.005)
10. Leng SX, **Huang Y.**, Fried LP. Frailty and Molecular Inflammation in Older Adults. *Long-Term Care Interface*, 2007, 8: 25-28.

11. **Huang Y.**, Dominici F, and Bell ML. Bayesian Hierarchical Distributed Lag Models for Summer Ozone Exposure and Cardio-respiratory Mortality - *Environmetrics*, July 2005, Issue 5, Vol 16: 547-562.
12. Leng SX, Xue QL, **Huang Y.**, Semba R, Chaves P, Bandeen-Roche K, Fried LP, and Walston JD. 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*, 2005, Vol. 60A, No.2: 195-199
13. Leng SX, Xue QL, **Huang Y.**, Bandeen-Roche K, Ferrucci L, Fried LP. and Walston JD. Baseline Total and Specific Differential White Blood Cell Counts and 5-year All-Cause Mortality in Community-dwelling Older Women. *Experimental Gerontology*, 2005; 40: 982-987
14. Rosenberg PS, **Huang Y.**, and Alter BP. Individualized Risks of First Adverse Events in Patients with Fanconi Anemia - *Blood, Journal of the American Society of Hematology*, July 2004, Vol 104, No. 2: 350-355 (Impact Factor = 10.6)
15. Haisfield-Wolfe ME, Schoenberg M, Welch J, and **Huang Y.** Improving the Quality of Continence for Bladder Cancer Patients Recovering after a Cystectomy With Neobladder Reconstruction – *Oncology Nursing Forum*, 2004, Vol 31, No. 2: 412

#### **PROCEEDING & ABSTRACT**

16. **Huang Y.**, Hauck FR, Signore C., Yu<sup>S</sup> A., Raju, T., Huang T., and Fein SB. “Bedsharing and Breastfeeding Duration among US Mothers”, **published abstract** in proceeding and poster, at American Public Health Association annual meeting, Washington, DC, Nov. 2011.
17. Fein SB, **Huang Y.**, Choiniere C., and Labiner-Wolfe J. “Association Between Infant Formula Advertising and Reasons for Mother’s Formula”, *Annual Marketing & Public Policy Conference Proceedings*, Washington, DC, May 2009.
18. Fein SB, **Huang Y.**, Choiniere C., and Labiner-Wolfe J. “Effects of Direct-To-Consumer Marketing of Infant Formula on Formula Choice and Loyalty”, **published abstract** in proceeding and talk, at American Public Health Association annual meeting, Philadelphia, PA, Nov. 2009.

#### **Non-Peer-Reviewed Work**

19. **Huang Y.** (2007). Statistical Methods for the Determination of Average Associational and Causal Effects. (Ph.D. thesis, published by ProQuest Information and Learning, UMI Dissertation Publishing)

**ARTICLES for Peer-Reviewed Journals – To be submitted in 2015** (Submitted manuscripts will be updated at <http://www.math.umbc.edu/people/yihuang.htm>)

20. **Huang Y.**, Dong<sup>S</sup> X., Raim<sup>S</sup> A., Baro<sup>S</sup> E., Bandeen-Roche K., Wang C. (2014). Latent Propensity Score for Average Causal Effect Estimation Allowing Covariate Measurement Error: A Finite Mixture Framework. (Journal → *Journal of the Royal Statistical Society: Series B, Statistical Methodology*)
21. **Statistical software:** Raim A<sup>S</sup>, Dong X<sup>S</sup>, and **Huang Y.** (2014). R package for calculating average causal effect using likelihood based approach allowing covariate measurement error: [EstACEwErrorinX\\_1.0.tar.gz](#) with package documentation for subroutines and demo example, [EstACEwErrorinX.pdf](#).
22. **Huang Y.**, Baro<sup>S</sup> E., and Song, G.. (2014). Marginal Meta Analysis for Safety Evaluation of Treatment in Clinical Trials – a lesson from Avandia study. (Journal → *Statistics In Medicine*)
23. Zhai<sup>S</sup> S., Mathew T., and **Huang Y.** (2014), Tolerance Limits for the Comparison of Dissolution Profiles. (Journal → *Biometrics*)

#### **ARTICLES for Peer-Reviewed Journals – In preparation**

24. Yu B., Yan J., and **Huang Y.** (2014), Estimating relative risks for longitudinal binary response data.
25. **Huang Y.**, Dong<sup>S</sup> X., Raim<sup>S</sup> A., Bandeen-Roche K., and Wang C. (2014). Reducing Bias in Average Causal Effect Estimation using Latent Propensity Score for Postmarketing Safety Evaluation of Breast Pump Usage.
26. Tucker A., **Huang Y.**, and Johnson K.(2014). Examining Cross-Payer Effects of Medicaid LTSS on Medicare Resource Use.
27. Baro<sup>S</sup> E., **Huang Y.**, Song G., and Liu L. (2014). Postmarketing Safety Evaluation on HIV Treatments by Combining Multiple Randomized Trials.
28. **Huang Y.**, Li R., Huang<sup>S</sup> H., Fein SB., et al (2015). Does Breastfeeding Protect Against Childhood Obesity at Infancy?
29. Baro<sup>S</sup> E., **Huang Y.**, Roy A. et al (2015). Bayesian Latent Propensity Score for Average Causal Effect Estimation Allowing Covariate Measurement Error.

#### **MEDIA ACTIVITY**

Joint **press release** by UVA and UMBC for the JAMA Pediatrics paper on “Influence of Bedsharing Activity on Breastfeeding Duration among US Mothers” was held in Sep, 2013. Media and news coverage are available in **TIME**, U.S. News and World report, Los Angeles Times, and etc, as what was mentioned by Dr. Frederick Rivara, editor of JAMA Pediatrics in a congratulation letter. News in Time is available here <<http://healthland.time.com/2013/09/25/to-bedshare-or-not-to-share-why-infants->

[shouldnt-sleep-with-mom-and-dad/?iid=sl-main-mostpop2>](#).

### **CONFERENCE PRESENTATIONS**

1. “Bayesian Average Causal Effect Estimation using Latent Propensity Score Allowing Covariate Measurement Error”, **invited talk**, 2014 Joint Statistical Meetings (JSM), Boston, MA. Aug, 2014.
2. “Cross-Payer Effects of Medicaid LTSS on Medicare Resource Use using Propensity Score Risk Profiling”, **invited talk**, 2014 Joint Statistical Conference of International Chinese Statistical Association (ICSA) & Korean International Statistical Society (KISS), Portland, Jun. 2014.
3. “Latent Propensity Score Approach for Average Causal Effect Estimation Allowing Covariate Measurement Error”, **poster**, 2014 Annual Causal Inference Conference, Brown Univ., 05/2014
4. “Marginal Meta Analysis for combining multiple randomized clinical trials with rare binary outcomes - reevaluating the safety concern on Avandia”, contributed talk, 2014 ENAR conference, Baltimore, MD, Mar. 2014.
5. “Cross-Payer Effects of Medicaid LTSS on Medicare Resource Use using Propensity Score Risk Profiling”, **invited talk**, in 66<sup>th</sup> Annual Scientific Meeting of the Gerontological Society of America, New Orleans, Louisiana, Nov. 2013.
6. “Reducing Bias in Postmarketing Safety Evaluation using Latent Propensity Score Allowing Covariate Measurement Error”
  - **Invited talk**, in 2013 Joint Statistical Conference of International Chinese Statistical Association (ICSA) & International Society for Biopharmaceutical Statistics (ISBS), Bethesda, Jun. 2013.
  - **Invited talk**, in 2013 FDA-Industry Statistics Workshop, Bethesda, Sep. 2013
  - Contributed talk, in 2013 JSM.
7. “Marginal Meta Analysis for Postmarketing Safety Study with Binary Outcomes”, **Invited talk**, Elande Baro (my PhD student), in 2013 Joint Statistical Conference of International Chinese Statistical Association (ICSA) & International Society for Biopharmaceutical Statistics (ISBS), Bethesda, Jun. 2013.
8. “Latent Propensity Score framework for Average Causal Effect Estimation Allowing Covariate Measurement Error in large observational studies”, **invited talk**, in ENAR conference (Washington D.C., Apr. 2012).
9. “Average Causal Effect Estimation Allowing Covariate Measurement Error for Continuous Outcome”, **poster**, in 2012 Atlantic Causal Inference Conference (Baltimore, MD, May, 2012).



10. “Causal Effect Estimation Allowing Covariate Measurement Error Using Propensity Score”, **invited topic-contributed talk with discussion**, at Joint Statistical Meetings (JSM) at Vancouver, British Columbia, Canada (Aug. 2010).
11. “Collapsibility Issues in Estimating Average Causal Effects on Binary Outcomes”, **invited talk**, First Joint Biostatistics Symposium, an international conference hosted at People's University of China, Beijing, China (July, 2010).
12. “Extending Propensity Score Subclassification Approach for Causal Effect Estimation Allowing Covariate Measurement Error”, **contributed talks**, at Joint Statistical Meetings (JSM) at Washington D.C. (Aug. 2009)
13. “Average Causal Effect Estimation Allowing Covariate Measurement: Extension of Propensity Score Subclassification Approach”, **contributed talks**, at
  - ENAR conference at Arlington, VA. (Mar. 2008)
  - 11<sup>th</sup> North American Meeting of New Researchers in Statistics and Probability (NRC) at Boulder, Colorado. (Jul. 2008)
  - Joint Statistical Meetings (JSM) at Denver, Colorado. (Aug. 2008)
14. “Extending Propensity Score Subclassification Approach Allowing Covariate Measurement Error”, **poster**, at Mid-Atlantic Causal Inference Conference. (May 2008)
15. “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).
16. “Selection of Average Causal Effects Measures for Binary Outcomes Using Propensity Score Subclassification”, contributed talk in ENAR conference (Tampa, FL, Mar. 2006).
17. “Estimating Different Measures of Average Treatment Effect on Binary Outcome by Propensity Scoring”, contributed talk in ENAR conference (Auston, TX, Mar. 2005).
18. “Summer ozone and mortality in 20 U.S. cities”, contributed talk in ENAR conference (Arlington, VA, Mar. 2002).

### **SEMINAR & COLLOQUIUM TALKS**

19. “Latent Propensity Score Approach for Average Causal Effect Estimation Allowing Covariate Measurement Error”. **Colloquium talk**,
  - Dept. of Biostatistics, Bioinformatics & Biomathematics, Georgetown University 09/2014
  - Dept. of Math and Stat, UMBC, 04/2014

20. “Post-marketing Safety Evaluation using Newly Developed Average Causal Effect Estimation Method Allowing Covariate Measurement Error”, **invited seminar**, at Dept. of Preventive Medicine and Epidemiology and Joint Doctoral Program in Gerontology, School of Medicine, UMB. (Jun. 16, 2011)
21. “Post-marketing Safety Evaluation using Newly Developed Average Causal Effect Estimation Method Allowing Covariate Measurement Error”, **invited seminar**, at CDER, FDA. (Jul. 14, 2011)
22. “Latent Propensity Score Approach for Average Causal Effect Estimation Allowing Covariate Measurement Error for Pharmaco-epidemiologic Research”, **invited seminar**, at Dept. of Pharmaceutical Health Services Research and Center for Drug Safety, School of Pharmacy, UMB. (Feb. 2011)
23. “New Causal Model for Post-marketing Evaluation of Medical Device - Average Causal Effect Estimation Allowing Covariate Measurement Error”, **invited poster presentation** for the Critical Path Grant Round, **FDA** (Dec. 2010)
24. “Estimating Average Causal Effects on Binary Outcomes: Collapsibility Issue in Propensity Score Subclassification”, **invited division seminar**, at Division of Epidemiology, Statistics, and Prevention Research of NICHD, NIH. (July, 2010).
25. “Average Causal Effects on Binary Outcomes using Propensity Scores: Measures and Selection, Collapsibility, and Estimation”, **invited seminar**, at Dept. of Statistics, George Mason University. (May. 2009)
26. “Ozone Effect on Mortality – a multi-site time series study”, **invited seminar and two month visits**, at Chinese Academy of Sciences and Peking University, Beijing, P. R. China. (Jan., Jun. and Jul., 2009)
27. “Causal Inference in Aging Research using Propensity Score Subclassification”, **invited seminar**, at Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland. (June, 2007)
28. “Finite Mixture Framework for Average Causal Effects Estimation Allowing Covariate Measurement Error”, **invited seminars**, at
  - UMBC, Department of Mathematics and Statistics. (Apr. 2007)
  - Johns Hopkins University, Department of Biostatistics, Survival, Longitudinal and Multivariate Data Working Group (SLAM). (May, 2007)
29. “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)
30. “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. (Mar. 2006)
31. “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/>, Florida, Feb. 2006)
32. “Analysis of Multiple Discrete Surrogates - Methods Review, especially Latent Class Regression”, with discussion. **Talk** in Survival, Longitudinal and Multivariate Data Working Group (Johns Hopkins University, Jan. 2006).
33. “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)

### **SERVICE TO THE DEPARTMENT**

- 2009 – 2011     **Organizer** for **Statistics Colloquium** (weekly seminar series)
- 2007 – 2010     **Member** of Department Graduate Program Committee
- 2008 - 2011     **Member** of two Faculty Recruitment Committees
- 2007 – present   **Member** of **Statistics** Graduate Program Committee.
- Graduate student evaluation and recruitment
  - Work closely with senior faculty and extend the previous M.S. program to Ph.D. program in 2008.
  - Collaborate with biomedical professionals on and off campus to facilitate the growth of Biostatistics program
  - Advise graduate students on biostatistics research.
- 2007 - present   **Faculty facilitator** - Graduate Student Seminar STAT 690
- 2007 - present   35 courses: **teaching 20** Statistics/ Biostatistics courses and **mentoring** graduate students for biostatistics research at MS and Ph.D levels for the rest **15** courses. (Course list is in appendix, page 14-15)
- List of newly created (\*) or completely re-designed (\*\*) courses**
- Graduate Courses for Biostatistics Track:
- Biostatistics Principle and Design: STAT 619\*\*
  - Categorical Data Analysis: STAT 603\*\*
  - Special Topics in Statistical Methods and Data Analysis: STAT 700/419\*
  - Longitudinal Data Analysis in Biomedical Research: STAT 700A\*

## Large Undergraduate Service Courses for UMBC:

- Statistics with Applications in the Biological Sciences:
  - STAT 350 (regular classroom teaching)
  - Hybrid STAT 350\*\*  
(online lectures and face-to-face discussions)

**SERVICE TO THE UNIVERSITY and UM SYSTEM**

- 2010 - 2012      Member of **Data and Safety Monitoring Committees** for:
- Prospective **randomized clinical trial** at UMB, School of Medicine, sponsored by NIA/NIH.
  - HP-00040312 entitled, “Learning About Hip Fracture Recovery in Men and Women” and HP-00043758 entitled, “Changes in Body Composition Following Hip Fracture”
  - PI: Jay Magaziner, Ph.D.
- Spring, 2012      Support UMBC undergraduate recruitment event hosted by Office of Undergraduate Admission – Scholar Visit Day Program for top prospective students, who have been awarded a merit-based scholarship, by allowing them to observe my class on STAT350.
- 2007 - present    **Organizing Committee** (Regional conferences hosted by UMBC)
- “Probability and Statistics Day” of UMBC, at 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014.
  - UMBC Biostatistics Symposium, Mar. 2011.
  - “Infinite Possibilities Conference” (Nationwide) for minority women in mathematics and statistics, Apr. 2012
- Chair for Invited Biostatistics session**
- 2008 Probability and Statistics Day, UMBC.
  - UMBC Biostatistics Symposium, Mar. 2011
- 2009                **Judge**, Graduate Research Conference at UMBC
- 2007 – present    **Group member**, WISE group under **ADVANCED** program, promoting women faculty and researcher in STEM fields.

**SERVICE TO THE PROFESSION****International & National Academic Conferences**

- 2012 – 2013    **Program Committee**
- 2013 Joint Statistics Conference of International Chinese Statistical Association (ICSA) and International Society for Biopharmaceutical Statistics (ISBS), Bethesda, DC, 06/2013.
- 2012 - present    **Organizer / Chair for invited** and contributed sessions
- 2014 Joint Statistical Meeting (JSM), organize the invited session - *New Development in the Propensity Score methods*:

*Addressing the Pressing Practical Issues*, sponsored by ASA Health Policy Statistics session.

- Chair invited sessions at JSM: 2012 (CA, USA), 2013 (Montreal, Canada)
- ENAR (International Biometrics Society Annual Meeting), 2012 (DC, 2012), 2014 (MD, USA).
- 2013 ICSA/ISBS Statistics Conference, DC.
- 2013 FDA Industry Statistics Symposium., DC.

### Editorial Services

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

2007 – present **Journal Referee**  
 Biometrics, Statistics in Medicine, International Journal of Biostatistics, Environmetrics, Pediatrics (Journal of the American Academy of Pediatrics), Communications in Statistics – Theory and Methods

### Academic Review Work

2014 - present **NIH external Grant reviewer (NIDDK)**  
 Scientific Review Group 2015/01 ZDK1 GRB-G (J3) 1 for NIDDK Ancillary R01s

2008 **Book Review**  
*Statistics for the Life Sciences, 3ed*  
 by Myra Samuels and Jeffery Witmer, published by Prentice Hall publishing

2007 – 2009 **Grant Review**

- the Office of Women’s Health (OWH), FDA
- Study Team of Infant Feeding Practices Study (IFPS) II, a nationwide study jointly led by FDA, NIH, and CDC.

### Professional Membership

2002 – present Member, International Biometric Society  
 2005 – present Member, American Statistical Association  
 2006 – present Member, Prevention Science and Methodology Group  
 2009 – present Member, International Chinese Statistical Association  
 2013 – present Member, American Gerontology Society

**Appendix: Course Lists** (\*: newly created or completely re-designed courses)

<i>Semester</i>	<i>Course Number</i>	<i>Course name (section number)</i>	<i>Enrollment</i>
Fall 2014	STAT603*	Categorical Data Analysis (01)	7
	STAT699	Independent Study with Graduate students (10)	2
	STAT899	Doctoral Dissertation Research (Thesis)	1
Spring 2014	STAT619*	Biostatistics Principle and Design (01)	8
	STAT350*	Statistics with Applications in the Biological Science (Hybrid sessions: 04/05/06, online lectures + 2 face-to-face instructor discussions)	121
	STAT699	Independent Study with Graduate students (10)	1
	STAT898	Pre-candidacy Doctoral Research (11)	1
	STAT899	Doctoral Dissertation Research (Thesis)	1
Fall 2013	STAT603*	Categorical Data Analysis (01)	12
	STAT350*	Statistics with Applications in the Biological Science (Hybrid sessions: 04/05/06)	107
	STAT898	Pre-candidacy Doctoral Research (11)	2
	STAT699	Independent Study with Graduate students (10)	1
Spring 2013	STAT350	Statistics with Applications in the Biological Science (Regular lecture sessions: 01/02/03)	86
	STAT619*	Biostatistics Principle and Design (01)	7
	STAT699	Independent Study with Graduate students (11)	1
Fall 2012	STAT699	Independent Study with Graduate students (10) (Teaching release: divorce and family crisis)	2
Spring 2012	STAT350	Statistics with Applications in the Biological Science (Regular lecture sessions: 01/02/03)	86
	STAT619*	Biostatistics Principle and Design (01)	4
	STAT699	Independent Study with Graduate students (10)	1
Fall 2011	STAT699	Independent Study with Graduate students (10)	3
	STAT898	Pre-candidacy Doctoral Research (10)	1
Spring 2011	STAT350	Statistics with Applications in the Biological Science (Regular lecture sessions: 01/02/03)	117
	STAT619*	Biostatistics Principle and Design (01)	6
	STAT699	Independent Study with Graduate students (11)	1
Fall 2010	STAT350*	Statistics with Applications in the Biological Science (Hybrid sessions: 04/05)	78
	STAT603*	Categorical Data Analysis (01)	17

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Spring 2010	STAT350*	Statistics with Applications in the Biological Science (Hybrid sessions: 07/08/09)	58
	STAT619*	Biostatistics Principle and Design (01)	9
Fall 2009	STAT 700/419*	Special Topics in Statistical Methods and Data Analysis (across UMB/UMBC campus) (03)	17
	STAT699	Independent Study with Graduate students (11)	3
Spring 2009	STAT 700A*	Longitudinal Data Analysis in Biomedical Research (01)	6
	STAT699	Independent Study with Graduate students (11)	1
Fall 2008	STAT350	Statistics with Applications in the Biological Science (Regular lecture sessions: 01/02/03)	79
	STAT619*	Biostatistics Principle and Design (01)	8
Spring 2008		Teaching release due to maternity leave	
Fall 2007	STAT619*	Biostatistics Principle and Design (01)	10

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