

CHIUNG-YU HUANG, PhD

Mathematical Statistician
Biostatistics Research Branch, NIAID, NIH

CONTACT INFORMATION

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EDUCATION

1997-2002 **Ph.D.** in Biostatistics
Johns Hopkins University, Baltimore, MD, USA

1996-1997 PhD course work in mathematics
National Tsing-Hua University, Hsinchu, Taiwan

1994-1996 **M.S.** in Mathematics
National Tsing-Hua University, Hsinchu, Taiwan

1991-1994 **B.S.** in Mathematics, *Summa Cum Laude*
National Tsing-Hua University, Hsinchu, Taiwan

POSITIONS

2004-present Mathematical Statistician
Biostatistics Research Branch,
National Institute of Allergy and Infectious Diseases,
National Institutes of Health, Bethesda, MD

2002-2004 Assistant Professor
Division of Biostatistics, School of Public Health,
University of Minnesota, Minneapolis, MN

1997-2002 Research and Teaching Assistant
Department of Biostatistics, Johns Hopkins University,
Baltimore, MD

1994-1997 Research and Teaching Assistant
Department of Mathematics, National Tsing-Hua University,
Hsinchu, Taiwan

HONORS AND AWARDS

2007	NIAID Merit Award National Institute of Allergy and Infectious Diseases National Institute of Health, Bethesda, MD
2005, 2006 2007	Special Act or Service Award Biostatistics Research Branch National Institute of Allergy and Infectious Diseases National Institute of Health, Bethesda, MD
2005	Performance Award for special achievement Biostatistics Research Branch National Institute of Allergy and Infectious Diseases National Institute of Health, Bethesda, MD
2003-2004	Grant-in-Aid of Research, Artistry, and Scholarship University of Minnesota, Minneapolis, MN
2002	Margaret Merrell Award for outstanding research Department of Biostatistics, Johns Hopkins University
1997-2002	Five-year departmental scholarship Department of Biostatistics, Johns Hopkins University
1994	Graduated first in class National Tsing-Hua University, Taiwan
1991-1994	Four-year college scholarship for gifted students in mathematics and science, Taiwanese Ministry of Education
1991-1994	President's Academic Awards (3 times) National Tsing-Hua University, Hsin-Chu, Taiwan

PROFESSIONAL ACTIVITIES

Referee	Biometrics Lifetime Data Analysis Controlled Clinical Trials Statistics in Medicine Journal of the Royal Statistical Society: Series C Pharmaceutical Statistics
External Referee	Health Care Efficiency Research Program of the Netherlands Organization for Health Research and Development (ZonMw), Netherlands

PUBLICATIONS

Refereed Articles:

1. Liang, K.-Y., **Huang, C.-Y.**, and Beaty, T. H. (2000). A unified sampling approach for multipoint analysis of qualitative and quantitative traits in sib pairs. *American Journal of Human Genetics* 66, 1631-1641.
2. Rosenblatt, A., Brinkman, R. R., Liang, K. Y., Almqvist, E. W., Margolis, R. L., **Huang, C.-Y.**, Sherr, M., Franz, M. L., Abbott, M. H., Hayden, M. R. and Ross, C. A. (2001). Familial influence on age of onset among siblings with Huntington disease. *American Journal of Medical Genetics* 105, 399-403.
3. Hu, T.-C., **Huang, C.-Y.**, and Rosalsky, A. (2003). On stability of trimmed sums. *Probability and Mathematical Statistics* 23, 1131-1150.
4. **Huang, C.-Y.** and Wang, M.-C. (2004). Joint modeling and estimation for recurrent event processes and failure time data. *Journal of the American Statistical Association* 99, 1153-1165.
5. **Huang, C.-Y.** and Wang, M.-C. (2005). Nonparametric estimation of the bivariate distribution of recurrence times. *Biometrics* 61, 392-402.
6. Chiang, C.-T., Wang, M. -C., and **Huang, C.-Y.** (2005). Kernel estimation of rate function for recurrent event data. *Scandinavian Journal of Statistics* 32, 77-91.
7. Bockting, W. O., **Huang, C.-Y.**, Ding, H., Robinson, B. E., and Rosser, B. R. S. (2005). Are transgender persons at higher risk for HIV than other sexual minorities?: A comparison of HIV prevalence and risks. *International Journal of Transgenderism* 8, 123-132.
8. Khaliq, A. A., Dimassi, H., **Huang, C.-Y.**, Narine, L., and Smego, R. A. (2005). Disciplinary action against physicians: Characteristics and predictors. *American Journal of Medicine* 118, 773-777.
9. **Huang C.-Y.**, Wang, M.-C., and Zhang, Y. (2006). Analyzing panel count data with informative observation times. *Biometrika* 93, 763-775.
10. Zonios D., Faloon, J., **Huang, C.-Y.**, and Bennett, J. (2007). Cryptococcosis and idiopathic CD4 lymphocytopenia. *Medicine*, 86(2):78-92.
11. Khaliq, A. A., **Huang, C.-Y.**, Ganti, A. K., Invie, K., and Smego, R. A. (2007). Comparison of resource utilization and clinical outcomes between teaching and non-teaching medical services. *Journal of Hospital Medicine* 2(3): 150-157.
12. Fay, M. P., **Huang C.-Y.**, and Twum-Danso, N. A. Y. (2007). Monitoring rare serious adverse events from a new treatment and testing for difference from a baseline rate. To appear in *Clinical Trials* 4, 598-610.
13. Read, S. W., Lempicki, R. A., Di Mascio, M., Srinivasula, S., Burke, R., Sachau, W., Bosche, M., Adelsberger, J. W., Sereti, I., Davey, R. T., Jr., Tavel, J., **Huang, C.-Y.**, Issaq, H. J., Fox., S. D., Lane, H. C., and Kovacs, J. A. (2008). CD4 T cell survival after

- intermittent Interleukin-2 therapy is predictive of an increase in the CD4 T cell count in HIV-infected patients. *Journal of Infectious Diseases* 198, 843–850.
14. **Huang C.-Y.**, Qin, J., and Zou, F. (2008). Empirical likelihood based inference in a genetic mixture model. *Canadian Journal of Statistics* 35, 563-574.
 15. **Huang C.-Y.**, Qin, J., and Follmann, D. A. (2008). Empirical likelihood-based estimation of the treatment effect in a pretest-posttest study. *Journal of the American Statistical Association* 103, 1270-1280.
 16. Luo, X. H., Wang, M.-C., and **Huang, C.-Y.** (2008). A comparison of various rate functions of a recurrent event process in the presence of a terminal event. To appear in *Statistical Methods in Medical Research*.
 17. Crompton, P. D., Kayentao, K., Doumbo, S., Guindo, A., Ongoiba, A., Weiss, G., Doumtable, D., Diakite, S., Kone, Y., **Huang, C.-Y.**, Doumbia, S., Fairhurst, R. M., Doumbo, O., Miller, L. H., Pierce, S. K., Traore, B. (2008). Sickle cell trait is associated with a delayed onset of uncomplicated malaria: Early observations from a longitudinal study of malaria immunity in Mali (with editorial commentary). To appear in the *Journal of Infectious Diseases*.
 18. Engler, R. J. M., Nelson, M. R., Klote, M. M., VanRaden, M. J., **Huang, C.-Y.**, Cox, N. J., Klimov, A., Treanor, J. J., Keitel, W. A., Nichol, K. L., Carr, W. W., and Walter Reed Health Care System Influenza Vaccine Consortium (WRHCS-IVC) (2008). Half dose trivalent inactivated influenza vaccine (TIV) 2004-05 compared to full dose: Age, dose, and gender effects on immune responses. To appear in the *Archives of Internal Medicine*.

Non-Peer Reviewed Articles:

1. **Huang, C.-Y.** and Luo, X. (2008) Book Review of “The Statistical Analysis of Recurrent Events (authors: Cook, R. J. and Lawless, J. F.),” *Biometrics* 64, 987-988.

Abstracts and Posters:

1. Stoel, B. C., **Huang, C.-Y.**, Putter, H., and Rutman O., “Volume correction of CT densitometry in drug evaluation trials on pulmonary emphysema: a simulation study,” European Respiratory Society Congress, Copenhagen, Denmark, September, 2005.
2. Tavel, J. A., **Huang, C.-Y.**, Shen, J., Follman, D., Shah, A., Metcalf, J., Davey, R., Polis, M., Kovacs, J., Masur, H. and Lane, H. C., “Interferon alpha therapy produces significant decreases in serum HIV load,” International AIDS Conference, Toronto, Canada, August, 2006.
3. Fay, M. P., **Huang C.-Y.**, and Twum-Danso, N. A. Y., “Monitoring rare serious adverse events from a new treatment and testing for difference from a baseline rate,” Fourth

- meeting of the Eastern Mediterranean Region of the International Biometric Society (EMR-IBS), Israel, January, 2007.
4. **Huang, C.-Y.**, Qin, J., and Wang, M.-C., “Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring,” 11th International Workshop on HIV Observational Databases, Monte Carlo, Monaco, March 2007.
 5. K. Kayentao, A. Ongoiba, G. Weiss, S. Doumbo, D. Doumtabe, Y. Kone, S. Diakite, A. Guindo, C.-Y. Huang, R. M. Fairhurst, O. Doumbo, L. H. Miller, S. K. Pierce, B. Traore, P. D. Crompton, “Sickle Cell Trait is Associated with a Delayed Presentation and Decreased Incidence of Uncomplicated Malaria in Mali: Results of a Cohort Study,” The American Society of Tropical Medicine and Hygiene 56th Annual Meeting, Philadelphia, PA, November 4-8, 2007.
 6. Read, S. W., Lempicki, R. A., Mascio, M. Di, Srinivasula, S., Burke, R., Sachau, W., Bosch, M., Adelsberger, J. W., Sereti, I., Davey, R. T., Jr., Tavel, J., **Huang, C.-Y.**, Issaq, H. J., Fox, S. D., Lane, H. C., and Kovacs, J. A., “Rate of CD4 T cell turnover following intermittent IL-2 therapy is predictive of change in CD4 T cell count in HIV-infected patients,” The 15th Conference on Retroviruses and Opportunistic Infections, Boston, MA, February 3-6, 2008.
 7. Crompton, P. D., Miura, K., Traore, B., Kayentao, K., Ongoiba, A., Weiss, G., Doumbo, S., Doumtabe, D., Kone, Y., **Huang, C.-Y.**, Doumbo, O. K., Miller, L. H., Long, C. A., Pierce, S. K., “Assessing the ability of the Growth Inhibition Activity (GIA) assay to predict malaria risk in a longitudinal study in Mali,” American Society of Tropical Medicine and Hygiene, December 7-11, 2008, New Orleans, LA.

Submitted Articles:

1. **Huang, C.-Y.**, Qin, J., and Wang, M.-C., Semiparametric analysis for recurrent event data with time-varying covariates and informative censoring. Submitted to *Biometrics*.
2. Crompton, P. D., Mircetic, M., Weiss, G., **Huang, C.-Y.**, McKittrick, N., Topham, D., Treanor, J., Durbin, A., Kazutoyo, M., Ellis, R., Martin, L., Malkin, E., Mullen, G., Miller, L. H., and Pierce, S. K. (2008). The TLR9 ligand CPG promotes the acquisition of *Plasmodium falciparum*-specific memory B cell in malaria naïve individuals. Submitted to *Journal of Clinical Investigation*.

In progress:

1. Tavel, J. A., **Huang, C.-Y.**, Shen, J., Metcalf, J. A., Dewar, R., Shah, A., Follmann, D. A., Herpin, B., Davey, R. T., Polis, M. A., Kovacs, J., Masur, H., and Lane, H. C. (2008). Interferon alpha produces significant decreases in HIV load.

2. Crompton, P. D., Miura, K., Traore, B., Kayentao, K., Ongoiba, A., Weiss, G., Doumbo, S., Doumtabe, D., Kone, Y., **Huang, C.-Y.**, Doumbo, O. K., Miller, L. H., Long, C. A., Pierce, S. K. (2008). Assessing the ability of the Growth Inhibition Activity (GIA) assay to predict malaria risk in a longitudinal study in Mali.
3. Beigel, J. H., Voell, J., **Huang, C.-Y.**, and Lane, H. C. (2008). Safety and immunogenicity of multiple and higher dose of an inactivated influenza A/H5N1 vaccine.
4. Recurrent event processes with size and shape parameters. (With Mei-Cheng Wang, Jing Qin and Yijian Huang)
5. Marginal analysis of recurrent event processes and failure time data. (With Mei-Cheng Wang)

PRESENTATIONS

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| 2007 | Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring. Joint Statistical Meetings, Salt Lake City, UT, July 2007. |
| 2007 | Invited talk, "Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring," Division of Biostatistics and Bioinformatics, National Health Research Institutes, Miaoli, Taiwan, June 2007. |
| 2007 | Invited talk, "Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring," Taipei International Statistical Symposium and ICSA International Conference, Taipei, Taiwan, June 2007. |
| 2007 | Invited talk, "Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring," Department of Biostatistics, University of Medicine and Dentistry of New Jersey, May 2007. |
| 2007 | Invited talk, "Semiparametric analysis for recurrent event data with time-dependent covariates and informative censoring," Division of Epidemiology, Statistics, & Prevention Research, National Institute of Child Health and Human, National Institutes of Health, Bethesda, MD, March, 2007. |
| 2006 | Invited talk, "Analyzing panel count data with dependent observation times," Division of Biostatistics and Bioinformatics Department of Epidemiology and Preventive Medicine, University of Maryland, Baltimore, October, 2006. |
| 2005 | Analyzing panel count data with dependent observation times. WNAR meetings. Fairbanks, AL. |
| 2005 | Invited talk, "Analyzing panel count data with dependent observation times. Statistics seminars," Institute of Statistics, National Tsing-Hua University, Hsinchu, Taiwan. |
| 2004 | Nonparametric estimation of bivariate recurrence time distribution. ENAR meetings, Pittsburgh, PA. |

- 2003 Invited talk, "Analyzing panel count data with dependent observation times. Statistics seminars," Department of Statistics, University of Minnesota, MN.
- 2003 Analyzing panel count data with dependent observation times. Joint Statistical Meetings, San Francisco, CA.
- 2002 Joint modeling and estimation for recurrent event process and failure time data. Joint Statistical Meetings, New York, NY.
- 2002 Invited talk, Modeling and estimation for recurrent event process and failure time data. Biostatistics seminars, University of Minnesota, Minneapolis, MN.
- 2002 Invited talk, Modeling and estimation for recurrent event process and failure time data. Biostatistics seminars, Washington University, St. Louis, MO.
- 2002 Invited talk, Modeling and estimation for recurrent event process and failure time data. Lombardi Comprehensive Cancer Center, Washington, DC.
- 2002 Invited talk, Modeling and estimation for recurrent event process and failure time data. ENAR meetings, Arlington, VA.
- 2002 Invited talk, Modeling and estimation for recurrent event process and failure time data. Statistics seminars, University of Maryland, Baltimore County, MD.
- 1999 Statistical methods for multiple events data. Longitudinal/survival working group seminar. Department of Biostatistics, Johns Hopkins University.