

CHIUNG-YU HUANG, PhD

Biostatistics Research Branch
National Institute of Allergy and Infectious Diseases
National Institutes of Health

CONTACT INFORMATION

Address: 6700-A Rockledge Drive Rm#5234
Bethesda, MD 20892-7609
Phone: 301-451-5125
Fax: 301-480-0912
E-mail: huangchi@niaid.nih.gov

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 Special Act or Service Award
2007, 2008 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
- 2004 NIH Travel Award, ENAR Young Investigators Meeting
- 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 *Biometrika, Biometrics, Statistica Sinica, Lifetime Data Analysis, Scandinavian Journal of Statistics, 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., Almquist, 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. **Huang C.-Y.**, Qin, J., and Zou, F. (2007). Empirical likelihood based inference in a genetic mixture model. *Canadian Journal of Statistics* 35, 563-574.
11. 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. *Clinical Trials* 4, 598-610.
12. Zonios D., Faloon, J., **Huang, C.-Y.**, and Bennett, J. (2007). Cryptococcosis and idiopathic CD4 lymphocytopenia. *Medicine*, 86(2):78-92.
13. 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.

14. 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.
15. Crompton, P. D., Kayentao, K., Doumbo, S., Guindo, A., Ongoiba, A., Weiss, G., Doumtabe, 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. *Journal of Infectious Diseases* 198, 1265-1275. (Editorial commentary on pages 1255-1257.)
16. 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 (2008). Half- vs full-dose trivalent inactivated influenza vaccine (2004-2005): age, dose, and sex effects on immune responses. *Archives of Internal Medicine* 168(22), 2405-2414. (Editorial commentary on pages 2402-2403.)
17. **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.
18. **Huang, C.-Y.**, Qin, J., and Wang, M.-C. (2009). Semiparametric analysis for recurrent event data with time-varying covariates and informative censoring. To appear in *Biometrics*.
19. Luo, X. H., Wang, M.-C., and **Huang, C.-Y.** (2009). 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*.
20. 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. (2009). The TLR9 ligand CPG promotes the acquisition of *Plasmodium falciparum*-specific memory B cell in malaria naïve individuals. *Journal of Immunology* 182(5): 3318-3326.
21. Beigel, J. H., Voell, J., **Huang, C.-Y.**, Burbelo, P. D. and Lane, H. C. (2009). Safety and immunogenicity of multiple and higher dose of an inactivated influenza A/H5N1 vaccine. *Journal of Infectious Diseases* 200(15) 501-509.
22. Zarembek, K. A., Cruz, A. R., **Huang, C.-Y.**, and Gallin, J. I. (2009). Antifungal activities of natural and synthetic iron chelators alone and in combination with azole and polyene antibiotics against *Aspergillus fumigatus*. *Antimicrobial Agents and Chemotherapy* 53(6), 2654-2656.
23. Traore, B., Koné, Y., Doumbo, S., Doumtabé, D., Traoré, A., Crompton, P., Mircetic, M., **Huang, C.-Y.**, Kayentao, K., Dicko, A., Sagara, I., Ellis, R. D., Miura, K., Guindo, A., Miller, L. H., Doumbo, O. K., and Pierce, S. K. (2009). The TLR9 agonist CpG fails to enhance the acquisition of *Plasmodium falciparum*-specific memory B cells in semi-immune adults in Mali. To appear in *Vaccine*.

Submitted Articles:

1. **Huang, C.-Y.**, Luo, X. H., Follmann, D. A. (2009). Novel testing and model checking methods for recurrent event data. Submitted to *Biometrics*.
2. 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. (2009). Interferon alpha produces significant decreases in HIV load. Submitted to *Journal of Interferon & Cytokine Research*.
3. 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. (2009). *In vitro* growth inhibition activity and malaria risk in an observational cohort study in Mali.
4. Waisberg, M., Vickers, B., Tarasenko, T., Scott, B., Willcocks, L., Molina-Cruz, A., Pierce, M., **Huang, C.-Y.**, Kastenmayer, R., Smith, K., Barrillas-Mury, C., Miller, L., Pierce, S. and Bolland, S. (2009). Genetic susceptibility to autoimmune disease confers resistance to severe malaria. Submitted to *Science*.

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, New Orleans, LA, December 7-11, 2008.
8. Luo, X. H., **Huang, C.-Y.**, "Analyze recurrent event data using within-cluster resampling method," Joint Statistical Meetings, Washington DC, August 1-6, 2009.