

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Chiehwen Ed Hsu		POSITION TITLE	
eRA COMMONS USER NAME (credential, e.g., agency login) CEDHSU		Associate Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
University of Texas School of Public Health, Houston	Ph.D.	2001	Health Management and Policy Sciences
University of Texas School of Health Information Sciences, U Texas Health Science Center at Houston	M.S.	2000	Health Informatics Public Health Informatics
University of Texas School of Public Health, Houston	M.P.H.	1997	Health Services Research
Medical College, Fujen Catholic Univ., Taipei, Taiwan	B.Sc.	1994	Public Health

A. Personal Statement

I have the expertise, leadership and motivation necessary to successfully carry out the proposed work. I have a broad background in public health and informatics, with specific training and expertise in key research areas for this application. In the past 10 years of faculty appointments with two major Schools of Public Health I carried out survey research and secondary data analysis on emergency preparedness and response in the state of Texas which results in 30 peer-reviewed publications, as either PI or co-Investigator on several previous CDC and Texas government funded grants. I will contribute to the proposed research by developing spatial analysis using GIS, and by establishing strong ties with community providers that will make it possible to conduct the research over time. In summary, I have a demonstrated record of successful and productive research projects in an area of high relevance for our population at risk, and my expertise and experience have prepared me to contribute to the proposed project.

B. Positions and Honors

Positions and Employment

- 2008- *Associate Professor*, Public Health Informatics. School of Health Information Sciences and School of Public Health. *Director*, Laboratory of Public Health Informatics and Spatial Analysis. *Associate Director of Health Informatics*, Center for Biosecurity and Public Health Preparedness, UTSPH. University of Texas Health Science Center at Houston, Texas.
- 2004-2007 *Assistant Professor*, School of Public Health, University of Maryland, College Park. Maryland.
- 2001-2004 *Assistant Professor*, Health Management and Policy, University of North Texas Health Science Center at Ft. Worth., Texas.
- 1998-2001 *Graduate Research Assistant*, Center for Health Policy Studies, University of Texas School of Public Health, University of Texas Health Science Center at Houston, Texas.
- 1997-1998 *Associate Programmer Analyst*, Data Integration & Security Dept., St. Luke’s Hospital, Houston.

Other Experience and Professional Memberships

- 2009 Scientific Study Section, Review Panel. CDC SIP Center for Public Health Informatics State of California HIV/AIDS Research Program.
- 2005-2006 Advisory Board, Center on Health Disparities, Adventist Healthcare Systems. Rockville, Maryland.
- 2004-2005 Health Data Committee, Maryland Plan for Reducing Health Disparities, Maryland Office of Minority Health and Health Disparities, Department of Health and Mental Hygiene, Baltimore, MD.
- 2005-2007 Faculty Senator. University of Maryland Senate, College Park, Maryland.
- 2005-2007 University IRB Regular Member/Main Reviewer. University of Maryland College Park Maryland.

Editor International Journal of Public Health Informatics. 2009 –

Editorial Boards

Associate Editor, International Journal of Computational Models and Algorithms in Medicine. 2008-

Review Board, American Journal of Health Behavior. 2005 -

Editorial Review Board, International Journal of Health Information Systems and Informatics. 2005 -

International Editorial Advisory Board of the Advances in Healthcare Information Systems and Informatics (AHISI) Book Series. 2007-

C. Selected Peer-reviewed Publications (Selected from 30 peer-reviewed publications)

Most relevant to the current application – Public Health Preparedness

1. **Hsu CE**, Jacobson HE, Feldman K, Miller JA, Soto Más F. Experience, Confidence, and Training Needs of Veterinarians in Public Health Preparedness and Response. *Journal Veterinary Medical Education*. 2008. 35(2):262-268. *PMID*: 18723813.
2. **Hsu CE**, Miller JA, Soto Más F, Nkhoma ET, Chambers CC. Capacity Building of Biodefense Informatics for Public Health Preparedness and Response in Rural Regions: EpiInfo, GIS, and Data Management Training. *Journal of Emergency Management*. 6(1): Jan/Feb. P70-78. 2008.
3. **Hsu CE**, Soto Mas F, Jacobson HE, Harris AM, Hunt V, Nkhoma E. Public Health Preparedness of Health Providers: Meeting the Needs of Diverse, Rural Community. *Journal of the National Medical Association*. 2006. 98 (11): 1784-91 *PMID*:17128688.
4. **Hsu CE**, Soto Mas F, Jacobson H, Papenfuss RL, Nkhoma E, Zoretic J., Assessing the Readiness and Training Needs of Non-urban Physicians in Public Health Emergency and Response. *Disaster Management and Response*. 2005. 3(4): p106-111. *PMID*: 16216794.
5. Soto Mas F, **Hsu CE**, Jacobson HE, Zoretic J, Felan M. Physician Assistants and Bioterrorism Preparedness. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice & Science*, 2006. 4(3), 301-306. *PMID*: 16999591.
6. Phosuwan A, **Hsu CE**, Dunn K, Herbold J. Applying Informatics to evaluate 2-1-1 registration system for emergency preparedness and response for vulnerable populations of the Gulf Coast Region of Texas, *Texas Public Health Association Journal*. 2009. 61 (4), 42-47
7. Jacobson HE, Soto Mas F, **Hsu CE**, Miller JA, Turley JP. Self-Assessed Emergency Readiness and Training Needs of Nurses in Rural Texas. *Public Health Nursing*. 2010. 27 (1): 41-48 *PMID*: 20055967
8. Nkhoma E, **Hsu CE**, Hunt V, Harris AM. Detecting Spatiotemporal Clusters of Accidental Poisoning Mortality among Texas Counties, U.S., 1980-2001. *International Journal of Health Geographics*. 2004.3(1):25 p 1-13. *PMID*: 15509301.
9. Tan J, Soto Mas F., **Hsu CE**, Chapter 5. E-Public Health Information Systems: E-Technologies for Public Health Preparedness and Surveillance. In Joseph Tan: *E-Health Care Information Systems: An Introduction for Students and Professionals*. San Francisco, CA: Wiley, Josey-Bass Publishers. ISBN: 0-7879-6618-5. pp. 127-154. April 2005.

Additional recent publications of importance to the field (in chronological order): GIS analysis

10. **Hsu CE**, Watson K, Boekeloo B, Shang N, Metzger C, Downer G. The Use of Emerging Informatics Techniques to Evaluate the Delivery of National Minority AIDS Education and Training Center (NMAETC) Programs to Address HIV and AIDS Disparities. *Journal of the National Medical Association*. *Accepted*. 2010:102(12). *In Press*.
11. **Hsu CE**, Soto Mas F, Miller JA, Nkhoma ET. A Spatial-Temporal Surveillance Approach for Prostate Cancer Disparities in Population Subgroups. *Journal of the National Medical Association*. 2007; 99(1): p72-86. *PMID*: 17304971
12. **Hsu CE**, Soto Mas F, Hickey JM, Miller JA, Lai D. Surveillance of the Colorectal Cancer Disparities Among Demographic Subgroups - A Spatial Analysis Approach. *Southern Medical Journal*. 2006. 99(9): p 301-308. *PMID*: 17004529
13. **Hsu CE**, Jacobson H, Soto Mas F. Evaluating the Disparities of Female Breast Cancer Mortality Among Racial Groups a Spatiotemporal Analysis. *International Journal of Health Geographics*. 2004. 3(1):4. p

- 1-11. *PMID: 14987336*
14. **Hsu CE**, Lai D, Begley C, Franzini L. The Association Between Income and Cancer Mortality in Texas and Taiwan - a Comparative Study of Spatial Statistics. *J Advances and Applications in Statistics*. 2002. 2(2):p149-176.
15. Chiu YW, **Hsu CE**, Wang MQ, Nkhoma ET. Examining Geographic and Temporal Variations of AIDS Mortality: Evidence of Racial Disparities. 2008: 100 (7): 788-796. *Journal of the National Medical Association*. *PMID: 18672555*.
16. Chiu YW, Wang MQ, Chuang HY, **Hsu CE**, Nkhoma ET (Nov 2008) A new application of spatiotemporal analysis for detecting demographic variations in AIDS mortality: an example from Florida., *The Kaohsiung journal of medical sciences*, 24 (11), 568-76. *PMID: 19239990*
17. **Hsu CE**, Liu CL, Juon HS, Chiu YW, Bawa J, Tillman U, Miller JA, Wang MQ. Reducing Liver Cancer Disparities - A Hepatitis B Preventive Program for the Asian American Community. *Journal of the National Medical Association*. 2007; 99(8): 900-907. *PMID: 17722668*
18. **Hsu CE**, Zhang GY, Yan AF, Shang N, Le TD. (2010) What made a successful Hepatitis B prevention program: educational intervention, infection status, and missing responses of at-risk Asian Americans, *Journal of Community Health*, 35 (3), In Press
19. Lee SM, Juon HS, GX Ma, **Hsu CE**. Model minority at risk: expressed needs of mental health by Asian American young adults. *Journal of Community Health*, 2009. 34 (2): 144-52. *PMID: 18931893*
20. Lee SM, Martinez G, Ma GX, **Hsu CE**, Robinson S, Bawa G, Juon HS. Barriers to Health Care Access in 13 Asian American Communities, *American Journal of Health Behavior*. 2010. 34 (1), 21-30 *PMID:19663748*
21. Le T, Bae S, **Hsu CE**, Singh K, Ning S. The Effects of Cardiorespiratory Fitness on Serum Ferritin Concentration and Incidence of Type 2 Diabetes: Evidence from Aerobics Center Longitudinal Study (ACLS), *The Review of Diabetes Studies*, 2009. 6 (1), 245-252. *PMID: 19290385*
22. **Hsu CE**, Johnson L and Brooks A. Promoting Health Information Literacy - Collaborative Opportunities For Faculty of Health Sciences and Academic Librarians. *Academic Exchange Quarterly*. 2003. 7(1):p 200-06.
23. Chiu YW, Chuang HY, **Hsu CE**, Huang CJ, Liu HW. Factors Influencing Women's Quality of Life in the Later Half of Life, In Press. *Climacteric - Journal of International Society of Menopause*. 2008. 11 (3), 201-211. *PMID: 18568785*.
24. Soto Mas F, Valderrama J, Brogger J, **Hsu CE**. Tobacco Control: Are We Appropriately Training Future Health Professionals? *American Journal of Health Studies*. 2006. 21(2). 115-123.
25. Soto Mas F, Papenfuss RL, Jacobson HE, **Hsu CE** and Urutia-Rojas X. Tobacco Intervention Practices & Training Needs of U.S. Hispanic Physicians: a Cross-sectional Study. *BMC Public Health*. 2005.15:120. *PMID: 16287500*.
26. Soto Mas F, Balcazar HG, Alberola JV, **Hsu CE**. Correlates of tobacco counseling among Hispanic physicians in the US: a cross-sectional survey study. *BMC Public Health*. 2008. 8:5 *PMID: 18179722*.
27. Younis H, Barhem B, **Hsu CE**. A Review of the Adoption of Just-in-time method and its effect on efficiency. *Public Administration and Management*. 2007. 12(2): 25-46.
28. Liu LC, **Hsu CE**, Younis MZ. The Association between Government Expenditure and Economic Growth: Granger Causality Test of US Data, 1947-2002. *Journal of Public Budgeting, Accounting, and Financial Management*. 2008. 20 (4), 439-452.
29. Lee S, Ma GX, Juon HS, Martinez G, **Hsu CE**, Bawa J. Assessing the Needs and Guiding the Future: Findings from the Health Needs Assessment in 13 Asian American Communities of Maryland in the United States., *Journal of immigrant and minority health / Center for Minority Public Health*.2009. *PMID: 20012202*

D. Research Support

Ongoing Research Support

CDC/ASPH Cooperative Agreement Herbold, John (PI) 08/08/2009- 08/09/2010

Texas Center for Public Health Preparedness and Response.

Role: Co-Investigator, Associate Center Director of Public Health Informatics. Site PI.

Nana Prefecture, 10% time Co-I Aoki, Noriaki (PI) 07/01/2009 -06/01/2010.
Japan: GIS project with Nana Prefecture on H1N1 surveillance and policy, Japan.

Completed Research Support

Cullen Trust for Health Care. Houston, Texas. Dunn K (PI) 01/01/08-08/31/09.

An interoperable community health information network for Houston, TX.

Role: Co-Investigator. **Lead**, Research and Evaluation Core.

Award No. 76376376302006-4 Soto Mas F (PI) 01/01/2006 –08/31/2006

Texas Department of State Healthcare Services

Database Inventory and Survey of Nurses for Emergency Preparedness and Response Purposes.

Role: Database/Statistical Consultant.

Community Partnership Grant **C. Ed Hsu** (PI) 03/01/2004 –08/31/2004

CDC/Association of Schools of Public Health

An Evidence-Based Approach to Addressing Health Disparities in Collin County, Texas. Role: **PI**

Community Partnership Grant Soto Mas, F (PI) 03/01/2004 –08/31/2004

CDC/Association of Schools of Public Health

A Collaborative Partnership for Bioterrorism Research Between UNTSPH and Collin County, Texas

Role: **Co-Principal Investigator**.

Contract No. 76376376302004-3 **C. Ed Hsu** (PI) 09/01/2003 –08/31/2004

Texas Department of Health

Biodefense Informatics and Health Surveillance Data Management Training for Public Health Preparedness and Response to Bioterrorism.

Role: **Project Director**

Contract No. 76376376302004-4 **C. Ed Hsu** (PI) 09/01/2003 –08/31/2004

Texas Department of Health

Database Inventory Based on the Survey of Physicians for Emergency Response Purposes.

Role: **Project Director**

Award No. 76376376302006-4 Soto Mas F (PI) 03/01/2005 –08/31/2005

Texas Department of State Healthcare Services

Database Inventory and Survey of Veterinarians and PAs for Emergency Preparedness and Response.

Role: Database/Survey Consultant.

Contract No. 7637637630-2003-01 Rene, A (PI) 09/01/2002 –08/31/2003

Texas Department of Health

Texas Department of Health. Public Health Preparedness and Response to Bioterrorism - Educational Programs in 38 counties of North Texas. Role: **Co-Director**.

Contract No. 7637637630-2003-02 Lykens, K (PI) 09/01/2002 –08/31/2003

Texas Department of Health

Public Health Preparedness and Response to Bioterrorism Needs Assessment, Texas Public Health Regions II and III Role: **Co-Director**.

Department of Health and Human Services, Montgomery County. State of Maryland. 01/01/2007 –12/30/2007.

Asian American Health Needs Assessment and Action Plan. Asian American Health Initiative. Montgomery County, MD. Role: **Co-Principal Investigator**

Department of Health and Human Services, Montgomery County, State of Maryland. 09/01/2005 –05/31/2006

Hepatitis B Education and Screening Program for 9 Asian American Communities. Asian American Health Initiative. Montgomery County, State of Maryland. Role: **Director**

Maryland Statewide Health Network Program, State of Maryland DHMH Through UMAB **C. Ed Hsu** (PI)

01/01/07-06/30/07 Spatial and Temporal Cluster Analysis of Colorectal and Breast Cancer Clusters in MD Counties. Role: **Director**.

Howard University Boekeloo, B (PI) 09/01/2004 –08/31/2006

HRSA, US DHHS Evaluation Team of National Minority AIDS Education and Training Center Role: Evaluator.

Contract No. 040819-8821. **C. Ed Hsu** (PI) 09/01/2004–06/31/2005

Department of Health and Human Services, Montgomery County, State of Maryland.

Asian American Health Initiative. A Community Health Needs Assessment Database for Asian Americans of Montgomery County, State of Maryland. Role: **Project Director**