CURRICULUM VITAE

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EDUCATION:

- Baldwin-Wallace College, B.S. (magna cum laude), Mathematics, 1972-1976.
- Carnegie-Mellon University, M.S., Mathematics, 1976-1978.
- Carnegie-Mellon University, Ph.D., Applied Mathematics, 1978-1982. Supervisor: Dr. Bernard D. Coleman. Thesis Title: <u>Demographic Prediction under Varying Vital Statistics.</u>

ACADEMIC POSITIONS:

- Teaching Assistant, Department of Mathematics, Carnegie Mellon University, 1976-1982.
- Associate Professor, Department of Applied Mathematics, National Chung Hsing University, 1982-87.
- Professor, Department of Applied Mathematics, National Chung Hsing University, 1987-2007.
- Chairman and Professor, Department of Applied Mathematics, National Chung Hsing University, 1995-97.
- Professor, Department of Public Health (2007-) and Graduate Institute of Biostatistics (2008-), China Medical University.

VISITING ACADEMIC POSITIONS:

- 1991-1992, Visiting Scientist, Center of Applied Mathematics, Cornell University.
- Spring 1992, Visiting Professor, Department of Mathematics, Harvey Mudd

College.

- Summer 1996, Visiting Professor, Department of Mathematics, University of Memphis.
- 1997-1998, Visiting Scientist, Wellcome Centre for the Epidemiology of Infectious Diseases, Oxford University.
- Summer 1998, Visiting Professor, Department of Mathematics, University of Memphis.
- Fall 2002, Visiting Scientist, Biomathematics Department, UCLA, Los Angeles USA
- Fall 2006, Visiting Professor, Department of Mathematics, University of New South Wales, Sydney, Australia.

OTHER SHORT ACADEMIC VISITS:
- ICTP, Trieste, Italy, October 1988
- Chulalongkorn University, Bangkok, Thailand, February 2001
- Ministry of Public Health, Thailand, February 2001
- LaTrobe University, Department of Mathematics and Statistics, Latrobe, Australia, February 2002.
- Université René Descartes (Paris V), Paris, France, July 2002
- US CDC, Atlanta, USA, January 2005
- Vanderbilt University, Department of Mathematics, Nashville, USA, February 2005.
- Université René Descartes (Paris V), Paris, France, July 2005
- University of Victoria, Department of Mathematics, Victoria, Canada, July 2005.
- University of British Columbia, Department of Mathematics, Vancouver, Canada, August 2005.
- IMS, National Singapore University, Singapore, September, 2005.
- National Center for AIDS/STD Control and Prevention, China Center for Disease Control and Prevention, Beijing China, June, 2007.
- Harbin Institute of Technology, Harbin, China, July, 2007.
- Northeast Normal University, Department of Mathematics, Changchun, China, July 2007.
- York University, Center for Disease Modeling, Toronto, Canada, July 2009.
- IMS, National Singapore University, Singapore, January, 2010.
- Paris V Descartes University, Paris, France, May-June 2010.
- Fields Institute, University of Toronto, Toronto, Canada, August 2010.
- Paris V Descartes University, Paris, France, June-July 2011.
- York University, Center for Disease Modeling, Toronto, Canada, May 2013.

- University of British Columbia, Department of Mathematics, Vancouver, Canada, September 2013.
- York University, Center for Disease Modeling, Toronto, Canada, June 2014.
- University of British Columbia, Department of Mathematics, Vancouver, Canada, June 2014.
- Xian Jiaotong University, Xian, China, August 2014.
- York University, Toronto, Canada, June 2016.
- Sun Yat-Sen University, School of Public Health, Guangzhou, China, August 2016.
- Hokkaido University, Graduate School of Medicine, Sapporo, Japan, October 2016.
- Sun Yat-Sen University, School of Public Health, Guangzhou, China, November 2016.
- Arizona State University, Tempe, AZ USA. January 16-22, 2017.

RESEARCH INTERESTS:

Mathematical Biology, Modeling and Analysis of Infectious Diseases Epidemiology, Ordinary Differential Equations, Population Dynamics, Mathematical Ecology

COURSES TAUGHT:

Undergraduate Courses: Calculus (for math majors as well as for engineering, biological, agricultural, and life sciences students), Ordinary Differential Equations, Linear Algebra, Partial Differential Equations, Vector Analysis, engineering mathematics, Computational Linear Algebra (for non-math majors), Linear Programming, Numerical Analysis, Topics in Public Health (in English), Disease and Civilization (in English)

Graduate Courses: Methods of Applied Mathematics (for graduate students in mathematics, engineering, and theoretical mechanics), Qualitative Theory of Ordinary Differential Equations, Advanced Topics in Ordinary Differential Equations (including applications to population dynamics and biomathematics), Modeling and Analysis of Infectious Disease Epidemiology, Applied Infectious Disease Modeling and Analysis, Special Topics in Public Heath, and graduate seminars at medical and public health schools on mathematical modeling in infectious disease epidemiology.

Supervised Student Thesis:

Shen-Mu Tsai, Master in Applied Mathematics, 1995

Chien-Hsun Chen, Master in Applied Mathematics, 2000

Yun-Shi Wang, Master in Applied Mathematics, 2005

Yuan-Sen Cheng, Master in Applied Mathematics, 2005
Chin-Kuei Shiao, Master in Applied Mathematics, 2006

HONORS AND AWARDS:
- Co-Executive Editor: Journal of Biological Systems
- Academic Editor: PLoS ONE
- Associate Editor: Journal of Biological Dynamics
- 2005 Canadian Studies Scholar Award (awarded by Canadian government).
- National Science Council (ROC) Annual Research Award, 1984-94, 1997, 2000. (award discontinued after 2000)
- Fogarty International Center/NIH Grant (1R03 TW00536-01), 1996-1998 (Co-investigator)
- 2006 National Chung Hsing University Faculty Outstanding Research Award
- National Science Council (ROC) Level 1 PI award, 2005-2006
- China Medical University, Faculty Outstanding Research Award, 2007-2013.
- 2007-2013, China Medical University Faculty Outstanding Research Achievement Awards.
- 2009-2011, 3-year French Ministry Delegated to Research (Ministere délégué de la Recherche) grant (Co-investigator)
- Best Paper Award, 10th Asia Pacific Travel Health Conference (APTHC 2014). Ho Chih Ming City, Vietnam. May 7-10, 2014.

SERVICE:
- Member of Executive Board, National Union of University Reforms, Taiwan, 1991-92.
- Chairman of Executive Board, National Chung Hsing University Faculty Association, 1993-1995.
- Member of National Chung Hsing University President Selection Committee, National Chung Hsing University, 1994, 1997, 2001.
- Member of Academic Committee and Faculty Evaluation Committee at National Chung Hsing University at various levels.
- Member, World Outreach Council, Society for Mathematical Biology, 1998.
- Member, Center for Promotion of Mathematics Committee, National Science Council of Taiwan, 2001-2004.
- Panel Member for grants and awards, Public Health and Environmental Medicine Discipline, National Science Council of Taiwan, 2009-2010.
- Member of Faculty Evaluation Committee at China Medical University at department and college levels.

- Panel Member for grants and awards, Mathematics Discipline, National Science Council of Taiwan, 2013-.

PUBLICATIONS: (* denotes correspondence author)

1. Coleman, B.D. and **Hsieh, Y.-H.**, (1979) Theory of the dependence of population levels on environmental history for semelparous species with short reproductive seasons. *Proc. Natl. Acad. Sci*. USA, **76**(10):5407-5410. (SCI)

2. Coleman, B.D., **Hsieh, Y.-H.** and Knowles, G.P., (1979) On the optimal choice of r for a population in a periodical environment. *Math. Biosci*. **45**:159-173. (SCI)

3. Coleman, B.D., Mares, M.A., Willig, M.R. and **Hsieh, Y.-H**,. 1982. Randomness, Area, and species richness. *Ecology*, **63**(4):1121-1133. (SCI)

4. **Hsieh, Y.-H.** 1985. On the use of optimal estimate in demography. *J. Sci. Eng. NCHU*, **22**:211-226.

5. **Hsieh, Y.-H.** 1986. A periodical population model. *Proc. Natl. Sci. Council, ROC*, **10**(3):266-274.

6. **Hsieh, Y.-H**. 1986. On density-dependent models and periodical populations, *J. Sci. Eng. NCHU*, **23**:123-132.

7. Coleman, B.D. and **Hsieh, Y.-H.*** 1986. On species-area relations: I. Random placement and sampling average, *Soochow J. Math.* 1**2**:11-22.

8. Coleman, B.D. and **Hsieh, Y.-H.*** 1987. On species-area relations: II. Estimates of abundance data. *Soochow J. Math*., **13**(1):31-44.

9. **Hsieh, Y.-H.** 1988. The phenomenon of unstable oscillation in population models. *Math. Comput. Modeling*, **10**(6): 429-435. (SCI)

10. **Hsieh, Y.-H.** 1989. On the evolution of altruism in an age-structured population. *Math. Comput. Modeling*, **11**: 427-475. (SCI)

11. **Hsieh, Y.-H.** 1990. An AIDS model with screening. *Math. Comp. Mod.*, **14**:640-643. (SCI)

12. **Hsieh, Y.-H.** 1990. Evolution of altruism communities. *COENOSES*, **4**(3): 145-147.

13. **Hsieh, Y.-H.** 1991. Persistence of altruistic community under indiscriminate altruism. *Proc. NSC(ROC)*, **15**(1): 33-39.

14. **Hsieh, Y.-H.** 1991. Modelling the effect of screening in HIV transmission dynamics. *Differential Equations Models in Biology, Epiemiology and Ecology,* Proc. Inter. Conf. on Diff. Eq. Claremont, Lec. Notes in Biomath., pp. 99-120. Springer-Verlag, New York.

15. **Hsieh, Y.-H.** 1991. An altruistic population model with sex differences. *Mathematical Population Dynamcis*, Proc. 2nd Inter. Conf. Math. Popula.

Dynamics. (O. Arino, D. Axelrod and M. Kimmel, eds.) Lecture Notes in Pure and Applied Mathematics, pp. 63-73. Marcel Dekker, Inc. New York.

16. **Hsieh, Y.-H.** 1992. Optimal estimate of population structure under varying vital rates. *Math. Popu. Studies*, **3**(4): 289-299.

17. Velaso-Hernanadez, J.X. and **Hsieh, Y.-H.** 1994. Modeling the effect of treatment and behavioral change in HIV transmission dynamics. *J. Math. Biol.*, **32**:233-429. (SCI: Misc. Mathematics, Misc. Biology)

18. **Hsieh, Y.-H**. and Velaso-Hernanadez, J. 1995. Community treatment of HIV-1: Initial and asymptotic dynamics. *BioSystems*, **35**(1):75-81. (SCI: Biology)

19. Busenberg, S., Cooke, K., and **Hsieh, Y.-H.** 1995. A model for HIV in Asia. *Math. Biosci.*, **128**(12):185-210. (SCI: Misc. Mathematics, Misc. Biology)

20. **Hsieh, Y.-H.** 1996. A two-sex model for treatment of HIV and behavior change in a population of varying size. *IMA J. Math. Appl. Med. Biol.*, **13**:151-173. (SCI: Misc. Mathematics, Misc. Biology)

21. Chen, C.W.S., Lee, S.-M., **Hsieh, Y.-H.**, and Ungchusak, K. (1999). A unified approach to estimating population size for births only models, *Compu. Stat. Data Analysis*, **32**:29-46. (SCI: Statistics)

22. **Hsieh, Y.-H**.* and Cooke, K. (2000) Behavior Change and Treatment of Core Group and Bridge Population: Its Effect on the Spread of HIV/AIDS. *IMA J. of Math. Appl. Biol. Med.* **17**(3): 213-241. (SCI: Mics. Mathematics, Misc. Biology)

23. **Hsieh, Y.-H.***, Chen, C.W.S., and Lee, S-M. (2000) Empirical Bayes approach to estimating the number of HIV-infected individuals in hidden and elusive populations. *Stat. Med.* **19**: 3095-3108. (SCI: Statistics, Public Health)

24. **Hsieh, Y.-H.***, Lee, S.-M., Chen, C.W.S., and Arazoza, H. (2001) On the recent sharp increase of HIV infections in Cuba. *AIDS*. **13**(3):425-428. (SCI: Public Health, Infectious Diseases)

25. **Hsieh, Y.-H.*** and Hsu, S.-P. (2001) The effect of density-dependent treatment/behavior change on the transmission dynamics of HIV. *J. of Math. Biol*. **43**, 69-80. (SCI: Biology)

26. **Hsieh, Y.-H.***, Arazoza, H., Lee, S.-M., and Chen, C.W.S. (2002) Estimating the number of HIV-infected Cubans by sexual contact. *Int. J. of Epidemiology*. **31**, 679-683. (SCI: Public Health)

27. **Hsieh, Y.-H.** (2002) The changing faces of commercial sex in Thailand: its implications for HIV transmission. *JAIDS*. **30**(5):537-540. (SCI: Public Health)

28. **Hsieh, Y.-H.** (2003) Politics hindering SARS work. *Nature*. **423**:381, May 22, 2003. (SCI Multidisciplinary Sciences)

29. **Hsieh, Y,-H.*** and Chen, C.W.S. (2003) Severe Acute Respiratory Syndrome:

Numbers do not tell whole story. *British Med. Journal*, **326**:1395-1396, June 21, 2003. (SCI Medicine, General and Internal)

30. **Hsieh, Y.**-H. (2003) SARS and the Internet. *New Eng. J Medicine*, **349**(7): 711-2,August 14, 2003 (SCI Medicine, General and Internal)

31. **Hsieh Ying-Hen***, Cathy W.S. Chen. (2003) Re: Mathematical modeling of SARS: Cautious in all our movements. J Epidem Com Health, 2003; (18 November 2003). Available at http://jech.bmjjournals.com/cgi/eletters/57/6/DC1#66. (SCI Public Health)

32. Li, C.-S., Liang, H. **Hsieh, Y.-H.**, and Twu, S-J. (2003) Comparison of viral trajectories in AIDS Studies using nonparametric mixed-effects models. *Journal of Modern Applied Statistical Methods*. 2003, **2**(2):443-450.

33. **Hsieh, Y.-H.*** and Chen, C.H. (2004) Modeling the social dynamics of the sex industry in Thailand: Its implications for spread of HIV. *Bull. Math. Biol*. **66**(1): 143-166. (SCI Mathematics, Interdisciplinary applications).

34. **Hsieh, Y.-H**.* C.W-S. Chen and S.-B. Hsu. (2004) SARS outbreak, Taiwan 2003. *Emerging Infectious Diseases*. **10**(2):201-206. Available online at: http://www.cdc.gov/ncidod/eid/vol10no2/03-0515.htm. (SCI Infectious Diseases)

35. **Hsieh, Y.-H.*** J-Y Lee and H.L. Chang. (2004) SARS epidemiology modeling. *Emerging Infectious Diseases*; **10**(6):1165-7, June 2004 (SCI Infectious Diseases).

36. **Hsieh Y,-H.*,** Chen CWS, Hsu SB. SARS outbreak in Taiwan (reply to Hsueh and Yang). (2004) *Emerging Infectious diseases,* **10**(8):1515-6, August 2004(SCI Infectious Diseases).

37. **Hsieh, Y.-H**.*, Chen, CWS. (2004) Mathematical modeling of SARS: Errata and updates. *J Epidem Com Health*, published online May 11, 2004. Available at: http://jech.bmjjournals.com/cgi/eletters/57/6/DC1 (SCI Public, Environmental and occupational health).

38. **Hsieh, Y.-H.** If we ignore politics, will politics ignore science? *Nature*. 2004. **432**:671(SCI Multidisciplinary Sciences).

39. **Hsieh, Y.-H.*,** de Arazoza Rodríguez, Héctor, Rachid Lounes. (2005) A Class of Models for HIV Contact Tracing in Cuba: Implications for Intervention and Treatment. To appear in "Deterministic and Stochastic Models for AIDS Epidemics and HIV Infection with Interventions." (Ed. W.Y. Tan). Singapore: World Scientific.

40. **Hsieh Y.-H.*,** King CC, Ho MS, Chen CWS, Lee JY, Liu FC, Wu YC, Wu JSJ. (2005) Quarantine for SARS, Taiwan. *Emerging Infectious Diseases*; **11**(2):278-82. (SCI Infectious Diseases).

41. **Hsieh, Y.-H.** (2005) Despite some flaws, online submission is the future. *Nature*

435:1160. (SCI Multidisciplinary Sciences)

42. **Hsieh Y.-H.** (2005) Mapping the complexities of science and politics. *Nature* **438**, 24 (3 November 2005) (SCI Multidisciplinary Sciences)

43. **Hsieh, Y.-H.***, H.-C. Wang, H. de Arazoza, R. Lounes, S-.J. Twu, and H.-S. Hsu. (2005) Ascertaining HIV underreporting in low HIV prevalence settings. *J. Biol. Systems*, 13(4):441-454. (SCI Mathematics, Interdisciplinary applications).

44. **Hsieh Y.-H.*** and Y. S. Cheng. (2006) Real-time forecast of multiphase outbreaks. *Emerging Infectious Diseases*; 12(1):122-7. (SCI Impact factor: 6.859, Infectious Diseases; 3/58).

45. Chen, C.W.S. and **Hsieh, Y.-H.** (2006) Bias may be unintentional but it's still there. *Nature*, 439:18 (SCI Impact factor: 36.101, Multidisciplinary Sciences; 1/57).

46. S.B. Hsu and **Hsieh Y.-H.*** (2006) Modeling intervention measures and public response during SARS outbreak. *SIAM J. Appl Math*, 66(2): 627-647. (SCI Impact Factor: 1.529, Applied Mathematics; 30/236).

47. **Hsieh, Y.-H.*** and Y.-S. Wang. (2006) Basic reproduction number for HIV model incorporating commercial sex and behavior change. *Bull. Math. Biol.* 68: 551–575. (SCI impact factor: 1.859, Mathematics, Interdisciplinary applications; 32/85)

48. **Hsieh, Y.-H.***, S.M. Lee, C.W.S. Chen, Y.M. Chen, S.I. Wu, S.F. Lai, and A.L. Chang. (2006) Estimating the HIV-infected population size in hard-to-count populations: the case of gay sauna patrons in Taipei. *Physica A*. 362(2): 495-503. (SCI Impact Factor: 1.521, Physics, Multidisciplinary; 27/80).

49. P. Georgescu and **Y.-H. Hsieh*.** (2006) Global Stability for a Virus Dynamics Model with Nonlinear Incidence of Infection and Removal. *SIAM J. Applied Mathematics*, 67(2): 337-353. (SCI Impact Factor: 1.529, Applied Mathematics; 30/236).

50. **Hsieh Y.-H.***, C.C. King, C.W.S. Chen, M.S. Ho, S.B. Hsu, and YC Wu. (2007) Impact of Quarantine on the 2003 SARS Outbreak: a retrospective modeling study. *J. Theoretical Biology*, 244: 729-736. (SCI impact factor: 2.371, Biology; 10/37)

51. **Y.-H. Hsieh**, P. van den Driessche, and L. Wang. (2007) A multi-patch model for spatial spread of disease: Impact of Travel between patches, *Bull. Math. Biology*, 69(4): 1355-75. (SCI impact factor: 1.859, Mathematics, Interdisciplinary applications; 32/85)

52. Paul S.F. Yip, **Y.-H. Hsieh**, Tina Y. Xu, K.F. Lam, C. C. King, and H. L. Chang. (2007) Assessment of Intervention Measures for the 2003 SARS Epidemic in Taiwan by Use of a Back-Projection Method. *Infect Control Hosp Epidemiol*

2007; 28(5): 525-530.   (SCI Impact Factor: 3.751, Public, Environmental, and Occupational Health: 15/140)

53. P. Georgescu and **Y.-H. Hsieh***. (2007) Global Dynamics of a Predator-prey Model with Stage Structure for Predator, *SIAM J. Applied Mathematics*, 67(5): 1379-1395. (SCI Impact Factor: 1.529, Applied Mathematics; 30/236).

54. S.B. Hsu and **Hsieh Y.-H.*** (2008) On the Role of Asymptomatic Infection in Transmission Dynamics of Infectious Diseases. *Bull. Math. Biology*, 70: 134-155. (SCI impact factor: 1.859, Mathematics, Interdisciplinary applications; 32/85).

55. R. Lounes, H. de Arazoza, **Y. H. Hsieh** and J. Joanes. (2008) Deterministic modeling on the size of the HIV/AIDS epidemic in Cuba. In *Mathematical Methods in Survival Analysis, Reliability and Quality of Life*. C. Huber, N. Limnios, M. Mesbah, M. Nikulin (Editors) ISTE and J. Wiley, London, Chap. 20, p. 317-330.

56. **Hsieh Y.-H.*** and Chin-Kuei Hsiao. (2008) A Predator-prey Model with Disease Infection in Both Populations, *Mathematical Medicine and Biology*, 25: 247-266. (SCI impact factor: 1.333, Biology; 44/85).

57. **Hsieh Y.-H.** (2008) Richards Model: A Simple Procedure for Real-time Prediction of outbreak Severity. To appear in *Modeling and Dynamics of Infectious Diseases*. Zhien Ma Jianhong Wu, Yicang Zhou, eds. Series in Contemporary Applied Mathematics (CAM), Vol. 11, p. 218-239, Beijing, Higher Education Press.

58. **Hsieh Y.-H.*** and Stefan Ma. (2009) Intervention Measures, Turning Point, and Reproduction Number for Dengue, Singapore, 2005. Am. J. Trop. Med. Hyg. 80(1):66-71. (SCI impact factor: 2.736, Tropical Medicine; 3/22)

59. **Y.-H. Hsieh*** and C.W.S. Chen. (2009) Turning points, reproduction number, and impact of climatological events for multi-wave dengue outbreaks. Trop. Med. International Health. 14: 628-638. (SCI impact factor: 2.302, Tropical Medicine; 5/22).

60. **Y.-H. Hsieh*** and Arazoza, H. (2009) Correspondence to "Universal voluntary HIV testing and immediate antiretroviral therapy". *Lancet*; 373: 1079-1080. (SCI impact factor: 39.207, MEDICINE, GENERAL & INTERNAL; 2/156).

61. **Y.-H. Hsieh**. (2009) Excess Deaths and immunoprotection during 1918–1920 Pandemic, Taiwan. Emerg. Infectious Dis.; **15** (10): 1617-9. (SCI Impact factor: 7.327, Infectious Diseases; 3/72).

62. **Y.-H. Hsieh***, C.W.S. Chen, S.-F. Hsu-Schmitz, C.C. King, W.J. Chen, H.-L. Chang, and M.S. Ho. (2010) Candidate genes associated with susceptibility to SARS-CoV: A Modeling Study. Bull. Math. Biol. 72(1): 122-132. (SCI impact factor: 1.292, Biology, 44/85)

63. G. Webb, **Y.-H. Hsieh,** J. Wu, and M. Blaser. (2010) Pre-symptomatic Influenza Transmission, Surveillance, and School Closings. Math. Model. Natural Phenomena, 5(3): 191-205. (SCI impact factor: 0.725, Multidisciplinary Sciences, 30/55)

64. **Y.-H. Hsieh**. (2010) Age Groups and Spread of Influenza: Implications for Vaccination Strategy. BMC Inf. Diseases; **10:**106. (SCI impact factor: 2.561, Infectious Diseases; 35/72)

65. C. Sun and **Y.-H. Hsieh**. (2010) Global analysis of an SEIR model with varying population size and vaccination. Applied Math. Modeling, 34 (10): 2685–2697. (SCI impact factor: 2.158, MECHANICS; 15/139).

66. P. Georgescu, **Y.-H. Hsieh***, H. Zhang. (2010) A Lyapunov functional for a stage-structured predator-prey model with nonlinear predation rate. Nonlinear Anal: B. Real World Appl. 11(5): 3653-3665. (SCI impact factor: 2.338, Mathematics, Applied; 11/251)

67. **Y.-H. Hsieh**, Yun-Shih Wang, Hector de Arazoza, and R. Lounes. (2010) Modeling secondary level of HIV contact tracing: its impact on HIV intervention in Cuba. BMC Inf. Diseases. 10:194   (SCI impact factor: 2.561, Infectious Diseases; 35/72)

68. **Y.-H. Hsieh**. (2010) Pandemic Influenza A (H1N1) during Winter Influenza Season in the Southern Hemisphere. 2010. Influenza and other Respiratory Viruses, 4(4): 187-197. (SCI impact factor: 1.895, Infectious Diseases, 52/72)

69. **Y.-H. Hsieh*,** D. Fisman, and J. Wu. (2010) On epidemic modeling in real time: An application to the 2009 Novel A (H1N1) influenza outbreak in Canada. BMC Research Notes 2010, **3:**283.

70. D.Y. Chao*, K.F. Cheng, **Y.-H. Hsieh,** T.C. Li, T.N. Wu, C.Y. Chen, C.A. Tsai, J.H. Chen, J.J. Lu, M.C. Su, Y.H. Liao, W.C. Chan. (2011) Serological Response and Persistence in Schoolchildren with High Baseline Seropositive Rate after Receiving 2009 Pandemic Influenza A(H1N1) Vaccine. Vaccine, 29(4): 617-623. (SCI impact factor: 3.485, Medicine, Research & Experimental; 35/124)

71. **Y.-H. Hsieh*** and C.H. Chan. (2011) Excess Healthcare Burden during 1918-1920 Influenza Pandemic in Taiwan: Implications for Post-pandemic Preparedness. BMC Public Health, 11:41. (SCI impact factor: 2.321, Public, Environmental, and Occupational Health; 51/162)

72. D.Y. Chao, K.F. Cheng, T.C. Li, T.N. Wu, C.Y. Chen, C.A. Tsai, J.H. Chen, J.J. Lu, M.C. Su, Y.H. Liao, W.C. Chan, **Y.-H. Hsieh***. (2011) Serological Evidence of Subclinical Transmission of the 2009 Pandemic H1N1 Influenza Virus Outside of Mexico. PLoS ONE, 6(1): e14555. (SCI impact factor: 3.534, MULTIDISCIPLINARY SCIENCES; 8/55)

73. R. Lounes, H. de Arazoza, A. Sanchez, J. Barrios and **Y-H Hsieh**. (2011) Modeling Detection of HIV in Cuba. Advances in Computational Intelligence, Springer Lecture Notes in Computer Science (LNCS) 6692 (Joan Cabestany, Ignacio Rojas and Gonzalo Joya, editors), Springer: 524-531.

74. Das P, Mukherjee D, **Hsieh YH**. 2011. An S-I Epidemic Model with Saturation Incidence: Discrete and Stochastic Version. International Journal of Nonlinear Analysis and Applications, (1) 1-9.

75. **Y.-H. Hsieh***, S. Ma, J. Valasco-Hernandez, V. Lee, L. W. Yen. (2011) Early Outbreak of 2009 Influenza A (H1N1) in Mexico Prior to Identification of pH1N1 Virus. PLoS ONE, 6 (8): e23853. (SCI impact factor: 3.53, MULTIDISCIPLINARY SCIENCES; 8/55)

76. D.Y. Chao, K.F. Cheng, T.C. Li, T.N. Wu, C.Y. Chen, C.A. Tsai, J.H. Chen, J.J. Lu, M.C. Su, Y.H. Liao, W.C. Chan, **Y.-H. Hsieh***. (2011) Factors Associated with Infection by 2009 Pandemic H1N1 Influenza Virus during Different Phases of Epidemic. Int. J. of Infectious Diseases. 15 (2011) e695–e701. (SCI impact factor: 2.33, Infectious Diseases; 44/72)

77. **Y.-H. Hsieh***, K.F. Cheng, D.Y. Chao, T.N. Wu, T.C. Li, C.Y. Chen, C.A. Tsai, J.H. Chen, M.H. Lin. Transmissibility and Temporal Changes of 2009 pH1N1 Pandemic during Summer and Fall/Winter Waves. BMC Inf. Diseases (2011) 11:332. (SCI impact factor: 2.56, Infectious Diseases; 35/72)

78. **Y.-H. Hsieh*** and Mei-Hui Lin. 1919 Influenza Pandemic in Australia: Temporal and Spatial Spreads. Canadian Applied Mathematics Quarterly, (2011) 19(2): 171-184.

79. **Ying-Hen Hsieh***, Yuhua Ruan, Cathy W. S. Chen, Wei Shi, Dongliang Li, Fengji Luo, and Yiming Shao. HIV prevalence and underreporting of men who have sex with men in Beijing. Int J STD AIDS. (2012) 23:606—607. (SCI impact factor: 1.35, Infectious Diseases: 73/84)

80. **Ying-Hen Hsieh***. Ascertaining the 2004-2006 HIV Type 1 CRF07_BC Outbreak among Injecting Drug Users in Taiwan, International J. Infectious Diseases, 17 (2013) e838–e844. (SCI impact factor: 2.53, Infectious Diseases: 42/84)

81. **Y-H Hsieh***, H. de Arazoza, and R. Lounes. Temporal Trends and Regional Variability of 2001-2002 Multi-wave DENV-3 Epidemic in Havana City: Did Hurricane Michelle Contribute to its Severity? Tropical Medicine & International Health. 18(7): 830–838 (2013) (SCI impact factor: 2.85, Tropical Medicine: 2/19)

82. **Y.-H. Hsieh***, Chen-An Tsai, Jin-Hwa Chen, Chien-Yu Lin, Chwan-Chuen King, Day-Yu Chao, Kuang-Fu Cheng. Asymptomatic Ratio for Influenza Infection

among Schoolchildren in Taiwan: Results from a Sero-epidemiological Study. BMC Infectious Diseases (2014) 14:80. (SCI impact factor: 2.77, Infectious Diseases: 37/84).

83. **Y.-H. Hsieh*,** Junli Liu, Y.-H. Tzeng, Jianhong Wu, Impact of visitors and hospital staff on nosocomial transmission and spread to community, Journal of Theoretical Biology, 356(2014): 20–29. (SCI impact factor: 2.11, MATHEMATICAL & COMPUTATIONAL BIOLOGY: 13/57).

84. Day-Yu Chao, Kuang-Fu Cheng, **Ying-Hen Hsieh**, Tsai-Chung Li, Trong-Neng Wu, Chiu-Ying Chen. Geographical Heterogeneity and Influenza Infection Within Households. BMC Infectious Diseases (2014), 14:369. (SCI impact factor: 2.77, Infectious Diseases: 37/84).

85. **YH Hsieh***, J Fang, J Lou, Y Yang, J Wu. Quantification of Bird-to-Bird and Bird-to-Human Infections during 2013 Novel H7N9 Avian Influenza Outbreak in China. PLoS ONE (2014), DOI:10.1371/journal.pone.0111834. (SCI impact factor: 2.81, MULTIDISCIPLINARY SCIENCES: 15/64).

86. Chao, D., Cheng, K., Liao, Y., Liu, M., **Hsieh, Y.,** Li, T., Wu, T. and Chen, C. (2014) Immunological Responses against Different Lineages of Influenza B Antigen in School Children during Two Consecutive Seasons. Health, 6, 2837-2847.

87. **Ying-Hen Hsieh*.** (2015) Temporal Course of 2014 Ebola Virus Disease (EVD) Outbreak in West Africa Elucidated through Morbidity and Mortality Data: A Tale of Three Countries. PLoS ONE, 10(11), e01408. (SCI impact factor: 2.81, MULTIDISCIPLINARY SCIENCES: 15/64).

88. **Ying-Hen Hsieh*.** (2015) 2015 Middle East Respiratory Syndrome Coronavirus (MERS-CoV) nosocomial outbreak in South Korea: insights from modeling. PeerJ, 3 (2015): e1505. (SCI impact factor: 2.18, MULTIDISCIPLINARY SCIENCES: 20/64).

89. Current Trends and Future Projection of HIV/AIDS Epidemic in Taiwan. **Ying-Hen Hsieh*** and Po-Chang Lin. Current HIV Research, 2016, 14, 138-147. (SCI impact factor: 1.61, INFECTIOUS DISEASES: 66/84).

90. **Hsieh YH***, Huang HM, Lan YC. (2016) On Temporal Patterns and Co-circulation of Influenza Virus Strains in Taiwan, 2008-2014: Implications of 2009 pH1N1 Pandemic, PLoS ONE, 11(5): e0154695. (SCI impact factor: 2.81, MULTIDISCIPLINARY SCIENCES: 15/64).

91. **Hsieh YH***. Temporal Patterns and Geographic Heterogeneity of Zika Virus (ZIKV) Outbreaks in French Polynesia and Central America, 2013-2016. PeerJ, 5:e3015; DOI 10.7717/peerj.3015. (SCI impact factor: 2.18, MULTIDISCIPLINARY SCIENCES: 20/64).

92. Sanna M, **Hsieh YH***. Temporal Patterns of Dengue Epidemics: The case of Recent Outbreaks in Kaohsiung. Asia-Pacific Journal of Tropical Medicine, 2017; 10(3): 292–298. (SCI impact factor: 0.93, TROPICAL MEDICINE: 14/19).

93. Sanna M, Hsieh YH*. Ascertaining the impact of public rapid transit system on spread of dengue in urban settings. Science of the Total Environment. 2017, 598: 1151-1159. (SCI impact factor: 4.90, ENVIRONMENTAL SCIENCES: 22/229).

94. **Hsieh YH***. Ascertaining the Impact of Catastrophic Events on Dengue Outbreak: The 2014 Gas Explosions in Kaohsiung, Taiwan. PLoS ONE, 12(5): e0177422. https://doi.org/10.1371/journal.pone.0177422. (SCI impact factor: 2.81, MULTIDISCIPLINARY SCIENCES: 15/64).

95. Chengjun Sun, **Ying-Hen Hsieh**, Paul Georgescu*. A model for HIV transmission in China with two interacting high-risk groups, Nonlinear Anal: B. Real World Appl, to appear. (SCI impact factor: 1.66, MATHEMATICS,APPLIED: 43/255).

96. Yanshan Zhu, Jianyong Wu, Kangkang Liu, Zicong Yang, Zhongmin Guo, **Ying-Hen Hsieh***, Jiahai Lu*. Temporal Changes of Dengue Epidemic Patterns in Guangzhou, 2005-2014, submitted.

97. Sanna M, J Wu, Y Zhu, Z Yang, J Lu, **YH Hsieh***. Spatial and Temporal Characteristics of 2014 Dengue Outbreak in Guangdong, China. Submitted.

98. Cathy W.S. Chen, **Ying-Hen Hsieh**, Hung-Chieh Su, and Jia Jing Wu. Elucidating Causal Relationship between Ambient Fine Particles and Human Influenza Incidence in Taiwan: Age group-specific Disparity and Geographic Heterogeneity, submitted.

99. **Ying-Hen Hsieh***, C.W.S. Chen. Ebola (EVD) outbreak in West Africa: Current trends and real-time projections, submitted.

100. **Ying-Hen Hsieh***, Yuhua Ruan, Mei-Hui Lin, Xuefeng Li, and Yiming Shao*. Recent Trend in HIV/AIDS Infections among MSM in Beijing, submitted.

101. R. Lounes, H. de Arazoza, and **Y-H Hsieh***. EPIDEMIOLOGY OF HIV/AIDS IN CUBA, 1986-2008: MODELING CHANGES IN DETECTION WITH TEMPORALLY VARYING PARAMETERS. Submitted.

RESEARCH GRANTS:
- Chief investigator of 32 consecutive National Science Council of Taiwan (NSC) Research Grants from 1982 to present.
- Co-investigator of Fogarty International Center/NIH Grant (1R03 TW00536-01) from 1996-1998 (3 years).
- Co-investigator of Taiwan CDC Research Grant 2001.
- Chief investigator of Taiwan CDC Research Grants 2002-2003 (2 years).

- Chief investigator of National Science Council of Taiwan (NSC) SARS Research Grants, 2003-2005 (2 years).
- Chief investigator of Taiwan Pandemic Influenza Vaccination R&D Program Grants (Taiwan CDC) 2006-2007 (1.5 years).
- Co-investigator, Ministere de la Recherche (French Ministry of Research) research grant "Modeling of Epidemiology of HIV infection in Cuba" 2004-2007.
- Co-investigator, French ANR research grant "Stochastic Modelling and Statistical Inference for the Spread of Infectious Communicable Diseases: from the Microscopic View to Macroscopic Approximation" 2008-2011.

Grants awarded 2009-2014 (Grant budget in NT dollars):

Grant	Role	Duration	Budget	Source
Modeling and analysis of infectious diseases (NSC 97-2314-B-039 -013 -MY3)	PI	2008/08/01 - 2011/07/31	3,780,000	NSC
Theoretical modeling in mathematical biology (97-2115-M-039-002-MY3)	PI	2008/08/01 - 2011/07/31	2,211,000	NSC
Integrative Study of statistical and mathematical analysis of infectious diseases (NSC 97-2118-M-039-004)	Co-PI	2008/08/01 - 2011/07/31	3,000,000	NSC
Integrated Study of Infectious Disease Epidemics (CMU 97 323)	Co-PI	2009/04/01 - 2010/03/31	600,000	CMU
Viroscopy: Stochastic Modelling and Statistical Inference for the Spread of Infectious Communicable Diseases	Co-PI	2009-2011	3,500,000	Ministere délégué de la Recherche (French Ministry Delegated to
Research in Mathematical Modeling and Analysis of HIV Epidemiology (NSC 100-2115-M-039-002)	PI	2011/08/01 - 2012/07/31	535,000	NSC
Modeling and Analysis of Infectious Disease Epidemiology (NSC 100-2314-B-039 -028-MY3)	PI	2011/08/01 - 2014/07/31	3,600,000	NSC
Mathematical modeling and Analysis of infectious diseases (NSC 101-2115-M-039-002)	PI	2012/08/01 - 2013/07/31	343,000	NSC
Mathematical modeling and analysis of HIV epidemiology	PI	2014/08/01 - 2016/07/31	903,000	MOST

Modeling Analysis of emerging and re-emerging infectious disease	PI	2014/08/01 - 2017/07/31	4,600,000	MOST

TALKS GIVEN AT CONFERENCES, SEMINARS, and WORKSHOPS:

- Second International Congress on Computational and Applied Mathematics, Leuven, Belgium. July, 1986.
- First International Conference on Industrial and Applied Mathematics, Paris, France. July, 1987
- Sixth International Conference on Mathematical Modeling, St. Louis. August, 1987.
- First Autumn Workshop on Mathematical Ecology, Trieste, Italy. November, 1988.
- International Workshop on Mathematical Community Ecology, Gorizia, Italy. November, 1988.
- Seventh International Conference on Mathematical and Computer Modeling, Chicago. August, 1989.
- International Conference on Differential Equations and Applications to Biology and Population Dynamics, Claremont, CA. January, 1990.
- International Congress of Mathematicians, Tokyo, Japan. August, 1990.
- 13th IMACS International Congress on Computation and Applied Mathematics, Dublin, Ireland. July, 1991.
- Gordon Conference on Theoretical Biology, Tilton, New Hampshire. June, 1992.
- Second G.J. Butler Memorial Conference on Differential Equations and Population Dynamics, Edmonton, Canada. June, 1992.
- First World Congress of Nonlinear Analysts, Tampa. August, 1992. (invited symposium talk)
- 29th Australian Applied Mathematics Conference, Adelaide, Australia. February, 1993.
- Summer Seminar on Nonlinear Analysis, Shitou, Taiwan. July, 1993.
- 9th International Conference on Mathematical and Computer Modeling, Berkeley. August, 1993.
- International Conference on Differential Equations and Applications to Biology and to Industry, Claremont. June, 1994.
- 1995 Society for Mathematical Biology Annual Meeting. Oaxtepec, Mexico. June, 1995.

- 3rd International Congress on AIDS in Asia and the Pacific, Chiangmai, Thailand. (invited symposium talk and co-chairman). September, 1995.
- Third International Conference on Mathematics, Computer, and Education, Dubna, Russia. January, 1996.
- Second World Congress of Nonlinear Analysts, Athens, Greece. (speaker and session chairman). July, 1996.
- 5th Conference on Differential Equations and Its Applications, Hsinchu, Taiwan, January 1997.
- 8th IMA Conference on Mathematical Theory of Biological Systems, Oxford, UK, July 1997.
- 2nd International Conference on Differential Equations and Its Applications, St. Petersburg, Russia, June 1998. (invited talk)
- 5th International Conference on Mathematical Population Dynamics, Zakopane, Poland, 1998, June 21- 26.
- 7th Conference on Differential Equations and Its Applications, Nantou, Taiwan, January 1999.
- 1999 Theory and Mathematics in Biology and Medicine, Amsterdam, Netherlands, 1999, June 29-July 3.
- 4th International Conference on Operations Research, Havana, Cuba, 2000, March 6-10.
- International Conference on Mathematical and Theoretical Biology, Hilo, Hawaii. 2001, July 16-19.
- International Workshop on Dynamical Systems and Their Applications in Biology, Cape Breton, Nova Scotia. 2001, August 2-6.
- International Conference of Chinese Mathematicians, Taipei, Taiwan, December, 2001.
- 2002 ESMTB Conference, Milan, Italy, 2002, July 2-6.
- 5th ICIAM, Sydney, Australia, 2003, July 7-11.
- MITACS-PIMS Health Canada Meeting on SARS, Banff, Canada, September 4-6, 2003. (invited talk)
- 2003 Taiwanese Mathematical Society Annual meeting (invited talk), Chunli, Taiwan, November 29, 2003.
- Seventh International Conference on Mathematical Population Dynamics (MPD-7), Trento Italy, June 21-25, 2004.
- MITACS – PIMS Special Program on Infectious Diseases, Banff, Canada, June 28-July 2, 2004. (invited talk)
- CDC-Taiwan Workshop on Diseases Prediction Model and GIS, Taipei, Taiwan, August 20, 2004. (invited lecture)

- CDC-Taiwan Outbreak Prevention Training Course, Taipei, Taiwan, November 13-14, 2004. (invited lecture)
- 2004 Taiwanese Mathematics Society Annual Meeting (Invited Speaker), Taipei, Taiwan, December 3-5, 2004.
- Third International Congress of Chinese Mathematicians, Hong Kong, December 17-December 22, 2004.
- US-CDC, Quarantine Division, Atlanta, GA, USA. January 26, 2005.
- Emory University, Population Biology and Evolutionary Ecology Program, Atlanta, GA, USA. January 28, 2005.
- Vanderbilt University, Department of Mathematics, Nashville, TN, USA. Colloquium talk. February 1, 2005.
- International Symposium on Theoretical Ecology and Evolutionary Biology (Invited Speaker), Taipei, Taiwan, February 15-16, 2005.
- ICTMA12 International Conference on the Teaching of Mathematical Modelling and Applications, City University of London, London, U.K. 10 - 14 July 2005.
- University of British Columbia, Department of Mathematics, Mathematical Biology seminar speaker, Vancouver, BC, Canada, August 15, 2005.
- Workshop on Mathematical Epidemiology, Banff, Canada. (session chairman and discussion leader) August 25-30, 2005.
- National Singapore University, IMS Program on Mathematical Modeling of Infectious Diseases: Dynamics and Control (Invited Lecture), Singapore. September 25 - October 1, 2005.
- 14th Conference on Differential Equations and Its Applications, Nankang, Taiwan, January 2006. (Invited talk)
- Workshop of China-Canada Joint Program on Modeling of Infectious Diseases, Xian, China, May 12-29, 2006. (Invited Talk)
- 2006 International Workshop on Mathematical Modeling of Infectious Disease Epidemiology, Hsinchu and Taipei, Taiwan. May 31-June 1, 2006. (Invited Talk)
- ASC/NZSA 2006, Auckland New Zealand, July 4-6, 2006. (Invited Speaker)
- Biostatistics Center, China Medical University, Biostatistics Day, Taichung, Taiwan, April 11, 2007 (Invited Talk)
- China CDC (Beijing), National Center for AIDS/STD Control and Prevention, Invited Lecture, Beijing, China, May 28, 2007.
- Chinese National Influenza Center, Invited Lecture, Beijing, China, May 29, 2007.
- 4th International Conference on Mathematical Biology, Wuyishan, China, May 29-June 1, 2007. (Invited Speaker)
- Harbin Institute of Technology, Science Research Center, Series of Lectures on

Mathematical Epidemiology, Harbin, China, July 12-14, 2007.

- Northeast Normal University, Department of Mathematics, Invited lectures on Mathematical and Statistical Modeling of Epidemiology, Changchun, China, July 15-16, 2007.
- Mathematical Society of Taiwan Annual Meeting, Academia Sinica, Taipei, Taiwan, December 21-24, 2007. (Invited Talk)
- 16th Conference on Differential Equations, Hsinchu, Taiwan, January 4-6, 2008. (Invited talk)
- China-Canada Conference on Mathematical Epidemiology, Shanghai, China, May 15-20, 2008. (Invited talk)
- Canada-China Conference on the Impact of Climate Change on Vector-borne and Waterborne Diseases, Nanjing, China, May 21-24, 2008. (Invited talk)
- MITACS-PHAC workshop on "Managing Public Health Crises: The Role of Models in Pandemic Preparedness", September 29 − October 1, 2008, Winnipeg, Canada. (Invited talk)
- Annual Meeting of Society for Mathematical Biology, July 27-31, 2009, University of British Columbia, Vancouver, Canada.
- Workshop on Epidemiology of Infectious Diseases: Emerging Challenges, Jan. 4 − 8, 2010, National University of Singapore, Singapore. (Invited talk)
- Conference on Computational and Mathematical Population Dynamics (CMPD3). May 31-June 4, Bordeaux, France. (Organized invited session)
- 4th Ditan International Conference on Infectious Diseases. Beijing, China. July 15-18, 2010. (Invited speaker)
- Summer 2010 Thematic Program on the Mathematics of Drug Resistance in Infectious Diseases, Fields Institute, University of Toronto. July 31-August 13, 2010, Toronto, Canada. (Invited lecture)
- 2nd Annual World AIDS Day (HIV-2011), Beijing, China, December 1-3, 2011 (Invited speaker)
- International Symposium on Biomathematics and Ecology: Education and Research, Portland, OR, USA. December 16-18, 2011.
- 6th Ditan International Conference on Infectious Diseases. Beijing, China. July 13-15, 2012. (Invited speaker)
- Open Problems in Mathematical Epidemiology Workshop, University of British Columbia, Vancouver, Canada. December 5-6, 2012. (Invited talk)
- Math on Planet Earth (MPE) 2013 Summer School on Mathematics of Infectious Diseases, York University, Toronto Canada, May 19-27, 2013 (Invited lecturer).
- 2013 SMB Annual Meeting, Phoenix, AZ, USA. June 10-13, 2013.
- 11th International Congress on AIDS in Asia and the Pacific (ICAAP 11),

Bangkok, Thailand. November 18-22, 2013.

- Indo-Canada Workshop on Mathematical Modeling of Infectious Diseases. IIT, Roorkee, India. January 20-22, 2014 (Invited lectures)
- 10th Asia Pacific Travel Health Conference (APTHC 2014). Ho Chih Ming City, Vietnam. May 7-10, 2014.
- 2014 NCTS International Conference on Nonlinear Dynamics with Applications to Biology, NTHU, Hsinchu, Taiwan. May 28-30, 2014. (Invited speaker)
- 2014 International Conference on Science and Engineering in Biology, Medical and Public Health (BioMedPub 2014). Bali, Indonesia, 31 May-01 June 2014. (Keynote speaker)
- 2014 Joint Meeting of Japan Society of Mathematical Biology and Society of Mathematical Biology (JSMB/SMB 2014 Osaka). July 28-August 1, 2014. (Invited minisymposium speaker)
- 2014 Xian Summer School on Mathematical Ecology and Epidemiology, Xian Jiaotong University, Xian, China, August 2-10, 2014. Invited Lecturer (18 hours of lectures).
- Meeting on "Practicalization of infectious disease models and application in industry and policymaking", Kyushu University, Fukuoka, Japan. October 1-3, 2014. (Plenary speaker)
- 2015 MathEpiComp, Erice, Italy. August 30-September 4.
- 2016 NCTS International Workshop in Mathematical Biology, May 21-23, 2016, Hsinchu, Taiwan. (Invited Speaker)
- International Conference on Applications of Mathematics to Nonlinear Sciences, Kathmandu, Nepal, May 26-29, 2016. (Special Plenary Speaker)
- Innovative Mathematical Modeling for the Analysis of Infectious Disease Data (IMAID), 11-12 October 2016, Kobe University, Kobe, Japan. (Plenary speaker)

PEER REVIEW:
- Executive Editor, Journal Of Biological Systems
- Academic Editor, PLoS ONE
- Associate editor, Journal of Biological Dynamics
- Editorial Board Member: Research and Reports in Tropical Medicine.
- External examiner and Ph.D. thesis committee member, Department of Mathematics, Central Europe University, Budapest, Hungary.
- Referee, research awards and grants for NSERC, Canada.
- Reviewer, Hong Kong Food and Health Bureau research grants.
- Referee for: SIAM Review, SIAM Journal of Applied Mathematics, Journal of Mathematical Biology, Mathematical Biosciences, Journal of Mathematical Analysis and Applications, Emerging Infectious Diseases, Canadian Medical

Association Journal, Taiwanese Journal of Mathematics, Tamkang Journal of Mathematics, Health Policy, Mathematical Population Studies, Journal of Urban Health, Simulation Modelling: Practice and Theory, Mathematical Biosciences and Engineering, Bulletin of Mathematical Biology, Journal of Biological Systems, Epidemiology and Infection, Proceedings of Royal Society: Interface, International Journal of Epidemiology, PLoS Medicine, Mathematical and Computer Modeling, e-Journal of Differential Equations, Health Education Research, Theoretical Population Biology, Clinical Infectious Diseases, BMC Infectious Diseases, The Journal of Lithuanian Association of Nonlinear Analysts, IMA Journal of Applied Mathematics, BMC Public Health, Mathematical Medicine and Biology, BMC Research Notes, Vaccine; Journal of Theoretical Biology, PLoS ONE, Pediatrics Infectious Diseases, Journal of Clinical Epidemiology, International Journal of AIDS&STD; Travel Medicine and International Health; BMJ Open, PLoS Currents: Influenza; Annals of Epidemiology.

- Referee for National Science Council (NSC) research grants and research awards in mathematics and public health.
- Referee for Taiwan Center for Disease Control (CDC-Taiwan) research grants.
- External referee for faculty hiring and promotions at several universities in Taiwan.

PROFESSIONAL MEMBERSHIP:

Mathematical Society of ROC, Taiwan Society for Industrial and Applied Mathematics, Society for Mathematical Biology, Asia-Pacific Travel Health Society

ACADEMIC ACTIVITIES ORGANIZED:

- Seminar on Applied Differential Equations and Numerical Analysis, Taichung, Taiwan. May 25 to June 15, 1991. Organizer.
- 1996 Workshop on Statistics Applied in AIDS and Cancer Research, Taichung, Taiwan. June-July, 1996. Organizer.
- 1998 Workshop on Statistics Applied in AIDS and Cancer Research, Taichung, Taiwan. June, 1998. Co-organizer.
- 2006 International Workshop on Mathematical Modeling of Infectious Disease Epidemiology, Hsinchu and Taipei, Taiwan. May 31-June 1, 2006. Co-organizer.
- 2008 Biostatistics Day Workshop on Epidemiology of HIV/AIDS, China Medical University (Taiwan), Taichung, Taiwan. November 26, 2008. Co-organizer.
- 2010 Biostatistics Day Workshop on Emerging Infectious Diseases: Modeling

and Analysis of 2009 pH1N1 epidemic. China Medical University (Taiwan), Taichung, Taiwan. April 28, 2010. Organizer.

- 2016 Summer Course on Mathematical Modeling and Analysis of Infectious Diseases. July 4-8, National Taiwan University, Taipei, Taiwan.

INTERNATIONAL VISITORS:

- Professor Robert Brunet, Department of Mathematics and Statistics, University of Montreal, Montreal, Canada. December, 1988.
- Professor Stavros Busenberg, Department of Mathematics, Harvey Mudd College, Claremont. CA. June, 1991.
- Professor Carlos Castillo-Chavez, Biometrics Unit and Center of Applied Mathematics, Cornell University, Ithaca, NY. June, 1991.
- Professor Herb Hethcote, Department of Mathematics, University of Iowa, Iowa City, IA. May, 1993.
- Dr. Shu-Fang HSU SCHMITZ, Institut fuer Mathematische Statistik und Versicherungslehre (IMSV), Universitaet Bern, Bern, Switzerland. December 1995.
- Professor Wai-Yuan Tan, Department of Mathematical Sciences, University of Memphis, Memphis, TN. June-July, 1996.
- Professor Wai-Yuan Tan, Department of Mathematical Sciences, University of Memphis, Memphis, TN. June 1998.
- Dr. Shu-Fang HSU SCHMITZ, Institut fuer Mathematische Statistik und Versicherungslehre (IMSV), Universitaet Bern, Bern, Switzerland. January 2000.
- Professor Hector de Arazoza, Department of Differential Equations, University of Havana, Havana, Cuba. June, 2002.
- Dr. John Glasser, Centers for Disease Control, Atlanta, U.S.A. October 2003.
- Professor Glenn Webb, Department of Mathematics, Vanderbilt University, Nashville, TN. August, 2004.
- Dr. Shu-Fang HSU SCHMITZ, Institut fuer Mathematische Statistik und Versicherungslehre (IMSV), Universitaet Bern, Bern, Switzerland. September 2004.
- Dr. John Glasser, Centers for Disease Control, Atlanta, U.S.A. June 2006.
- Dr. Hal Smith, Department of Mathematics and Statistics, Arizona State University, USA, May 2007.
- Dr. Xiaoqiang Zhao, Department of Mathematics, Memorial University of Newfoundland, Canada, May 2007.
- Dr. Yiming Shao, National Center for AIDS/STD Control and Prevention, Chinese CDC, November, 2008.

- Dr. Yuhua Ruan, National Center for AIDS/STD Control and Prevention, Chinese CDC, November, 2008.
- Dr. Simon Levin, Department of Ecology & Evolutionary Biology, Princeton University, USA, December, 2008.
- Dr. Ben Cowling, Department of Community Medicine, Hong Kong University, Hong Kong, April 27-29, 2010.
- Dr. Joseph Wu, Department of Community Medicine, Hong Kong University, Hong Kong, April 27-29, 2010.
- Professor Hector de Arazoza, Department of Mathematics, University of Havana, Havana, Cuba, January, 2012.
- Dr. Rachid Lounes, Laboratoire MAP5, UMR-CNRS 8145, Université Paris Descartes, Paris, France, January, 2012.