Ivo M. Foppa
Curriculum Vitae

Education

Degree	University	Major	Year
ScD (Doctor of Science)	Harvard School of Public Health	Epidemiology	2001
SM (Master of Science)	Harvard School of Public Health	Epidemiology	1995
Dr. med. (Doctor of Med.)	University of Bern, Switzerland	Medicine	1991
Arzt Diplom (MD equiv.)	University of Bern, Switzerland	Medicine	1987

Academic Appointments

2012 to Present	Adjunct Associate Professor of Epidemiology, Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA
1/2008 to 7/2011	Assistant Professor of Epidemiology, Department of Epidemiology, Tulane School of Public Health and Tropical Medicine, New Orleans, LA
4/2010 to 2011	Adjunct Assistant Professor, Pathobiological Sciences, LSU School of Veterinary Medicine, Baton Rouge, LA
1/2002 to 12/2007	Assistant Professor of Epidemiology, Department of Epidemiology and Biostatistics, School of Public Health, University of South Carolina, Columbia, SC

Other Experience

8/2011-	Sr. Research Scientist (Contractor with Battelle), Influenza Division, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, Atlanta, GA
2001	Research Associate, Natural Standard, Cambridge, MA
1991–1994	Research Associate, Institute of Social and Preventive Medicine, University of Bern, Bern, Switzerland
1993	Assistenzarzt (Resident), Department of Geriatric Medicine, Zieglerspital, Bern, Switzerland
1991	Assistenzarzt, Department of Ob/Gyn, Regional Hospital, Thun, Switzerland
1990	Assistenzarzt, Department of Internal Medicine, Community Hospital, Jegensdorf, Switzerland
1988	Assitenzarzt, Department of Surgery, Regional Hospital, Brugg, Switzerland

Publications

Peer–Reviewed Articles Published, in Press or accepted for publication ("&" denotes IMF's graduate students)

Flannery B, Reynolds S, Blanton L, Santibanez T, O'Halloran A, Lu P, Chen J, **Foppa IM**, Gargiullo P, Bresee J, Singleton J, Fry A. Influenza Vaccine Effectiveness Against Pediatric Deaths: 2010-2014. *Pediatrics* (in press).

Ferdinands JM, **Foppa IM**, Fry AM, Belongia E, Jackson M. Re "Invited Commentary: Beware the Test-Negative Design". Letter to the Editor, *Am. J. of Epid.* (in press).

Arinaminpathy N, Kim IK, Gargiullo P, Haber M, **Foppa IM**, Gambhir M, Bresee J. Estimating direct and indirect protection from influenza vaccination in the USA. *Am. J. of Epid.* (in press).

Foppa IM, Ferdinands JM, Chaves SS, Haber MJ, Reynolds SB, Flanner B, Fry AM. The Case Test-Negative Design for Studies of the Effectiveness of Influenza Vaccine in Inpatient Settings. *Int. J. Epidemiol*. 2016, doi: 10.1093/ije/dyw022, First published online: March 15, 2016

Jackson JL, Jackson LA, Kieke B, McClure D, Gaglani M, Murthy JS, Malosh R, Monto A, Zimmerman R, **Foppa IM**, Flannery B, Thompson M. Incidence of medically attended influenza infection and cases averted by vaccination, 2011/12 and 2012/13 influenza seasons. *Vaccine 2015*, 33 (39): 5181–5187.

Carias C, Reed C, Kim IK, **Foppa IM,** Biggerstaff M, Meltzer M, Finelli L, Swerdlow D. Averted costs due to influenza vaccination. *PLOS ONE,* 10(7): e0132922.

Grijalva CG, Zhu Y, Williams DJ, Self WH, Ampofo K, Pavia A, Stockman C, McCullers J, Arnold S, Wunderink R, Anderson E, Lindstrom S, Fry A, **Foppa IM**, Finelli L, Bramley A, Jain S Griffin MR, Edwards KM. Influenza vaccine receipt and reduced odds of hospitalization for community-acquired laboratory-confirmed influenza pneumonia. *JAMA* 2015, 314(14):1488-1497.

Foppa IM, Cheng PY, Reynolds SB, Shay DK, Carias C, Bresee JS, Kim IK, Gambhir M, Fry AM. Deaths Averted by Influenza Vaccination U.S. during the Seasons 2005/6 through 2012/13. *Vaccine* 2015, 33(26): 3003–9.

Izurieta HS, Thadani N, Shay DK, Lu Y, Maurer A, **Foppa IM**, Franks R, Pratt D, Forshee R, MaCurdy T, Worrall C, and Kelman J. Comparative effectiveness of high- versus standard-dose influenza vaccines among United States residents aged >65 years, 2012-13. *Lancet ID* 2015, *15*(3): 293-300.

Manore CA, Hickmanny KS, Hyman JM, **Foppa IM**, Davis JK, Wesson DM, Mores C. A network-patch methodology for adapting agent-based models for directly transmitted disease to mosquito-borne disease. *Journal of Biological Dynamics* 2015, 9(1): 52-72.

Moudy RM, Michaels S, Jameson SB, Londono B, Lopez B, Caillouet KA, Hallmark KJ, Davis JK, **Foppa IM**, Dorn PL, Wesson DM. Factors Associated with Peridomestic *Triatoma sanguisuga* (Hemiptera: Reduviidae) Presence in Southeastern Louisiana. *Journal of Medical Entomology* 2014, 51 (5): 1043-1050.

Haber M, An Q, **Foppa IM**, Shay DK, Ferdinands JM, Orenstein WA. A Probability Model for Evaluating the Bias and Precision of Influenza Vaccine Effectiveness Estimates from Case-Control Studies. *Epidemiology and Infection* 2014, 143 (7): 1417–1426.

Wong KK, Cheng PY, **Foppa I**, Jain S, Fry AM, Finelli L. Estimated Pediatric Mortality Associated With Influenza Virus Infections — United States, 2000–2009. *Epidemiology and Infection* 2014: 1-8.

Foppa IM, Haber M, Ferdinand JM, Shay DK. The Case Test-Negative Design for Studies of the Effectiveness of Influenza Vaccine. *Vaccine* 2013, 31(30):3104-9.

Cummins B, Cortez R**, Foppa IM**, Walbeck J, Hyman JM. A Spatial Model of Mosquito Host-Seeking Behavior. *PLoS Comput Biol* 2012, 8(5): e1002500.

Foppa IM, Moore J, Caioullët KA, Wesson DM. Disproportionate Mosquito Feeding on Aggregated Hosts. *Journal of Medical Entomology* 2011, 48(6): 1210-1213.

Foppa IM, Beard RH**&**, Mendenhal IH**&**. The impact of West Nile virus on the abundance of selected North American birds. *BMC Vet Res* 2011, 7:43.

Edillo F, Kiszewski A, Manjourides J, Pagano M, Hutchinson M, Kyle A, Arias J, Gaines D, Lampman R, Novak R, **Foppa I**, Lubelczyk C, Smith R, Moncayo A, Spielman A. The effects of latitude and longitude on the population structure of *Culex pipiens* s.l., vectors of West Nile virus in North America. *Am J Trop Med Hyg*. 2009;81(5):842-8.

Krause PJ, Grant-Kels JM, Tahan SR, Dardick KR, Alarcon-Chaidez F, Bouchard K, Visini C, Deriso C, **Foppa IM**, Wikel S. Dermatologic Changes Induced by Repeated *Ixodes scapularis* Bites and Implications for Prevention of Tick-borne Infection. *Vector-Borne and Zoonotic Diseases* 2009, 9 (6):603-610.

Roseveare CW**&**, Goolsby D, **Foppa IM**. Potential and Actual Terrestrial Rabies Exposure in People and Domestic Animals, Upstate South Carolina, 1994-2004: A Surveillance Study. *BMC Public Health* 2009; 9:65.

Foppa IM, Hossain MM. Revised Estimates of Excess Mortality due to Influenza among people above 50 in the U.S. from 1995 through 2005. *Emerging Themes in Epidemiology* 2008; 5:26

Caillouët KA, Michaels SR, Xiong X, **Foppa I**, Wesson DM. Increase in West Nile neuroinvasive disease following Hurricane Katrina. *Emerging Infectious Diseases* 2008; 14(5):804-7

Krause PJ, Gewurz BE, Hill D, Marty FM, Vannier E, **Foppa IM**, Furman RR, Neuhaus E, Skowron G, Gupta S, McCalla C, Pesanti EL, Young M, Heiman D, Hsue G, Gelfand JA, Wormser GP, Dickason J, Bia FJ, Hartman B, Telford SR 3rd, Christianson D, Dardick K, Coleman M, Girotto JE, Spielman A. Persistent and relapsing babesiosis in immunocompromised patients. *Clin Infect Dis*. 2008 46(3):370-6.

Hughes AL, Piontkivska H, **Foppa IM**. Rapid Fixation of a Distinctive Sequence Motif in the 3'Non-coding Region of the Clade of West Nile Virus Invading North America. *Gene* 2007;399(2):152-61.

Foppa IM, Evans CL, Wozniak A, Wills W. Mosquito Fauna and Arbovirus Surveillance after Hurricane Katrina in Coastal Mississippi. *Journal of the American Mosquito Control Association* 2007;23(2):229-32.

Foppa IM, Spielman A. Does Reservoir Host Mortality Enhance Transmission of West Nile Virus? *Theor Biol Med Model*. 2007 May 11;4(1):17

Edillo FE, Tripet F, McAbee RD, **Foppa IM**, Lanzaro GC, Cornel AJ, Spielman A. A Set of Broadly Applicable Microsatellite Markers for Analyzing the Structure of Culex pipiens (Diptera: Culicidae) Populations. *J Med Entomol* 2007; 44 (1): 145-149.

Alarcon-Chaidez F, Ryan R, Wikel S, Dardick K, Lawler K, **Foppa IM**, Tomas P, Cushman A, Hsieh A, Spielman A, Bouchard KR, Dias F, Aslanzadeh J, and Krause PJ. Confirmation of Tick Bite by Detecting Antibody to Ixodes Calreticulin Salivary Protein. *Clincal and Vaccine Immunology* 2006; 13(11):1217-22.

Krause PJ, Foley DT, Burke GS, Christianson D, Closter L, Spielman A, and the Tick-Borne Disease Study Group (**Foppa I,** Ryan R, Baute P, Miller J, Wikel S, Tomas P, Dias F, George T, Pollack R, Telford III SR). Reinfection and Relapse in Early Lyme Disease. *Am J Trop Med Hyg.* 2006;75(6):1090-1094.

Foppa IM, Karmaus W, Ehlken B, Fruehwirth M, Heininger U, Plenge-Bonig A, Forster J. Health care-associated rotavirus illness in pediatric inpatients in Germany, Austria, and Switzerland. *Infect Control Hosp Epidemiol*. 2006 Jun;27(6):633-5.

Roberts RS**&, Foppa IM.** Prediction of Equid Risk of West Nile Virus Infection Based on Dead Bird Surveillance. *Journal of Vector-Borne and Zoonotic Diseases*. Vector Borne Zoonotic Dis. 2006; 6(1):1-6.

Foppa IM. The Basic Reproductive Number of Tick-Borne Encephalitis Virus: An Empirical Approach. *J Math Biol.* 2005 Dec;51(6):616-28.

Krause PJ, Closter L, Lepore T, Telford III SR, Sikand V, Ryan R, Persing D, Radolf JD, and Spielman A and The Tick-Borne Infection Study Group: Cable R, **Foppa I**, Pollack RJ, et al. Increasing Health Burden of Human Babesiosis in Endemic Sites. *American Journal of Tropical Medicine and Hygiene*, 2003; 68: 431-6.

Foppa IM, Krause PJ, Spielman A, Goethert H, Gern L, Brand B, Telford SR 3rd. Entomologic and serologic evidence of zoonotic transmission of Babesia microti, eastern Switzerland. *Emerg Infect Dis.* 2002; 8:722-6.

Ebel GD, **Foppa I**, Spielman A, Telford SR III. A Focus of Deer Tick Virus Transmission in the North-Central United States. *Emerging Infectious Diseases.* 3(2):1999.

Telford SR 3rd, Armstrong PM, Katavolos P, **Foppa I**, Garcia AS, Wilson ML, Spielman A. A new tick-borne encephalitis-like virus infecting New England deer ticks, Ixodes dammini. *Emerging Infectious Diseases.* 3(2):165-70, 1997.

Foppa I, Spiegelman D. Power and sample size calculations for case-control studies of gene-environment interactions with a polytomous exposure variable. *Am J Epidemiol.* 146(7):596-604, 1997.

Foppa I, Noack RH. The relation of self-reported back pain to psychosocial, behavioral, and health-related factors in a working population in Switzerland. Social Science & Medicine. 43(7):1119-26, 1996.

Foppa I, Calmonte R, Noack H, Abelin T. Berufliche Stellung und Pravalenz kardiovaskularer Risikoindikatoren bei berufstatigen Mannern in der deutschsprachigen Schweiz. *Sozial- und Präventivmedizin.* 41(1):11-8, 1996.

Foppa I, Noack H, Minder CE. The relation of reported symptoms to social, individual, and behavioral indicators of ill-health: is the number of reported symptoms a unique general dimension of ill-health? *J Clin Epidemiol.* 48(7):941-8, 1995.

Noack H, Calmonte R, **Foppa I**. Gesundheit, gesundheitsrelevantes Verhalten und Erwerbstätigkeit. *Sozial- und Präventivmedizin*. 38 Suppl 2:S77-82, 1993.

Noack RH, **Foppa I**, Calmonte R. Reported disease and psychological well-being in Swiss adults. *Sozial- und Präventivmedizin*. 38(5):297-312, 1993.

Foppa I, Minder CE. Oral, pharyngeal and laryngeal cancer as a cause of death among Swiss cooks. *Scandinavian Journal of Work, Environment & Health*. 18(5):287-92, 1992.

Submitted manuscripts

Shay DK, Chillarige Y, Kelman J, Forshee RA, **Foppa IM**, Wernecke M, Lu Y, Ferdinands JM, Iyengar A, Fry AM, Worrall C, Izurieta HS. Comparative effectiveness of high-dose versus standard-dose influenza vaccines among US Medicare beneficiaries in preventing post-influenza deaths during 2012-13 and 2013-14. Under Review.

Flannery B, Reynold S, Blanton L, Santibanez T, O'Halloran A, Lu PY, Chen J, **Foppa IM**, Gargiullo P, Bresee J, Singleton JA, Fry AM. Influenza Vaccine Effectiveness Against Pediatric Deaths, 2010-2014: A Case-Cohort Study. Under Review.

Books

Foppa IM. A Historical Introduction to Mathematical Modeling of Infectious Diseases. (2016, 1st Edition, Elsevier—ISBN:9780128022603)

Book Chapters

Foppa, IM. Modellierung von Epidemien [Modeling of Epidemics], Foppa, I.M.; in: Lehrbuch Infektionsepidemiologie [Textbook of Infectious Disease Epidemiology]. Eds: Schlipköter U., Wildner M. Bern: Hans Huber Verlag, 2006.

Telford, S.R., III and **Foppa, I.** Tickborne encephalitides. In: Tickborne Infectious Diseases. Ed: Cunha, B.A. Marcel Dekker, Inc., NY, 2000.

Review papers

Ulbricht C, Basch E, Boon H, Conquer J, Costa D, Culwell S, Dao J, Eisenstein C, Foppa IM, et al. Seaweed, Kelp, Bladderwrack (Fucus vesiculosus): An Evidence-Based Systematic Review by the Natural Standard Research Collaboration. *Alternative and Complementary Therapies* 2013;19(4):217-30.

Ulbricht C, Abrams TR, Basch E, Davies-Heerema T, **Foppa I**, Hammerness P, et al. An evidence-based systematic review of gymnema (Gymnema sylvestre R. Br.) by the Natural Standard Research Collaboration. *Journal of dietary supplements* 2011;8(3):311-30.

Ulbricht C, Basch E, Burke D, Cheung L, Ernst E, Giese N, **Foppa I**, Hammerness P, Hashmi S, Kuo G, Miranda M, Mukherjee S, Smith M, Sollars D, Tanguay-Colucci S, Vijayan N, Weissner W. Fenugreek (Trigonella foenum-graecum L. Leguminosae): an evidence-based systematic review by the natural standard research collaboration. *J Herb Pharmacother* 2007;7:143-77.

Ulbricht C, Basch E, Bent S, Boon H, Corrado M, **Foppa I**, Hashmi S, Hammerness P, Kingsbury E, Smith M, Szapary P, Vora M, Weissner W. Evidence-based systematic review of saw palmetto by the Natural Standard Research Collaboration. *J Soc Integr Oncol* 2006;4:170-86.

Basch E, Bent S, **Foppa I**, Haskmi S, Kroll D, Mele M, Szapary P, Ulbricht C, Vora M, Yong S. Marigold (Calendula officinalis L.): an evidence-based systematic review by the Natural Standard Research Collaboration. *J Herb Pharmacother* 2006;6:135-59.

Basch E, Ulbricht C, Basch S, Dalton S, Ernst E, **Foppa I**, Szapary P, Tiffany N, Orlando CW, Vora M. An evidence-based systemic review Echinacea E. angustifolia DC, E. pallida, E. purpurea by the Natural Standard Research Collaboration. *J Herb Pharmacother* 2005;5:57-88.

Basch E, **Foppa I**, Liebowitz R, Nelson J, Smith M, Sollars D, Ulbricht C. Lavender (Lavandula angustifolia Miller). J *Herb Pharmacother* 2004;4:63-78.

Hammerness P, Basch E, Ulbricht C, Barrette EP, **Foppa I**, Basch S, Bent S, Boon H, Ernst E. St John's wort: a systematic review of adverse effects and drug interactions for the consultation psychiatrist. *Psychosomatics* 2003;44:271-82.

Book Reviews

Foppa I. Body and Emotion–the Aesthetics of Illness and Healing in the Nepal Himalayas. Desjarlais,R. *Social Science & Medicine*. 46(9):1251, 1998

Published Abstracts

Foppa IM, Reynolds SB, Reed C, Shay DK, Bresee J. Influenza Excess Mortality Estimation: Current Issues and Possible Solutions. Presented as Poster, Options IX Conference, 24–28 August 2016, Chicago, IL.

Reynolds SB, Flannery B, Blanton L, Santibanez TA, O'Halloran A, Lu PJ, Smith S, Chen J, **Foppa IM**, Garguillo P, Bresee J, Singleton JA, Fry AM. Estimating Vaccine Effectiveness Against Influenza-Associated Pediatric Deaths in the United States During Four Influenza Seasons, 2010-2011--2013-2014. Oral Presentation, Options IX Conference, 24–28 August 2016, Chicago, IL.

Shay DK, Chillarige Y, Kelman J, Forshee RA, Wernecke M, **Foppa IM**, Lu Y, Ferdinands JM, Pratt D, Fry AM, Iyengar A, Worrall C, Izurieta HS. Comparative effectiveness of high-dose versus standard-dose influenza vaccines among US Medicare beneficiaries for the prevention of death within 30 days of a hospital-diagnosed influenza infection: a 2012-13 and 2013-14 retrospective cohort study. Presented as Poster, Options IX Conference, 24–28 August 2016, Chicago, IL.

Cummins B, Cortez R, Walbeck J**,Foppa IM.** Simulations of Mosquito Host-Seeking Behavior. Am. J. Trop. Med. Hyg. 2010;83(5):55. (contributed; poster)

Blanco NV, **Foppa IM.** Climate and Major Dengue Epidemics in the Americas. Am. J. Trop. Med. Hyg. 2010;83(5):273. (contributed; poster)

Foppa IM. The Impact of Mortality in Birds on Incidence of West Nile Virus Human Neuroinvasive Disease. Am. J. Trop. Med. Hyg. 2010;83(5):317. (contributed; poster--withdrawn)

Foppa IM, Beard RH, Hossain MM. The Impact of West Nile Virus on the Abundance of North American Birds. Am. J. Trop. Med. Hyg. 2009;81(5):317. (contributed; oral presentation)

Foppa IM, Moore JL, Cortez R, Gallegos AC, Wesson DM. The Relationship between Host Abundance and Per-Host Feeding Density of *Culex quinquefasciatus* Say (Diptera: Culicidae). Am. J. Trop. Med. Hyg. 2009;81(5):281. (contributed; poster)

Michaels SR, Yates M, Kramer W, Wesson D, **Foppa I**. Predictors for Epidemic West Nile Virus Transmission in East Baton Rouge Parish, Louisiana, 2003-2007. Am. J. Trop. Med. Hyg 2008;79:509. (contributed; poster)

Foppa IM, Caillouet KA, Michaels SR, Cortez R, Wesson DM. Host Density Effects on Feeding Behavior of *Culex Quinquefasciatus* Say (Diptera: Culicidae). Am. J. Trop. Med. Hyg 2008;79:255. (contributed; poster)

Caillouet KA, Michaels SR, Xiong X, **Foppa I**, Wesson DM. Regional Increase in West Nile Neuroinvasive Disease after Hurricane Katrina. Am. J. Trop. Med. Hyg 2008;79:510. (contributed; poster)

Foppa IM, Vogt RM. A Modified Y-Tule Olfactometer to Investigate the Host Density-Dependent Behavioral Response of Mosquitoes. Am. J. Trop. Med. Hyg 2007, 77 (5): 172. (contributed; poster)

Klinger EV, **Foppa IM**, Goethert HK, Telford SR. Methodological considerations in describing the population dynamics of deer ticks on white-footed mice. American Journal of Tropical Medicine and Hygiene 2007;77:1062 . (contributed; oral presentation)

Krause PJ, Gewurz B, Hill D, Marty F, **Foppa I**, Vannier E, Neuhaus E, Skowren G, Gupta S, Furman RR, McCalla C, Peanti E, Young M, Heiman DF, Gelfand JA, Wormser G, Dickason J, Telford SR, Hartman B, Bia F, Dardick K, Christianson, Coleman M, Speilman A. Failure of standard babesiosis therapy in immunocompromised hosts. Am. J. Trop. Med. Hyg 2007;77:1045 . (contributed; poster)

Foppa IM. Host Mortality as an Epidemiologic Mechanism of the New World Success of West Nile Virus. Am. J. Trop. Med. Hyg 2006, 75 (5): 176 . (contributed; poster)

Robich RM, McCune S, Gaines D, **Foppa I**, Hutchinson M, Moncayo A, Spielman A. Differential Latitudinal Adaptations of Diapause in Culex Pipiens Mosquitoes in the Eastern United States. Am. J. Trop. Med. Hyg 2006, 75 (5): 267. (contributed; poster)

Edillo FE, Kiszewski A, Hutchinson M, Bugbee L, Arias J, Johnson J, Gaines D, Halpaus J, Cuffee P, Lampman R, Novak RJ, **Foppa I**, Holman M, Smith R, Moncayo A, Anderson M, Boisvert M, Spielman A. Population Structure of the *Culex Pipiens* vectors of West Nile Virus In Eastern North America. Am. J. Trop. Med. Hyg 2006, 75 (5): 173-74. (contributed; poster)

Foppa IM, Goethert HK, Spielman A, Telford SR 3rd. Basic reproductive number estimates for deer tick-borne zoonoses in the Atlantic Northeast. Am. J. Trop. Med. Hyg 2005, 73: 323. (contributed; oral presentation)

Edillo FE, Kiszewski AE, Hutchinson M, Bugbee L, Arias J, Johnson J, Gaines D, Halpaus J, Cuffee P, Lampman R, **Foppa I**, Holman M, Moncayo A, Anderson M, Boisvert M, Spielman A. 2005. Population structure of

Culex pipiens complex mosquitoes in Northeastern United States. Oral presentation at the 54th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Washington D.C. 12/11-12/15/2005.

Roseveare CW**, Foppa IM,** Goolsby D**.** Animal Incident Reports/Rabies Epidemiology in Upstate SC. Poster at SCPHA, Myrtle Beach, SC, May 25th (contributed; coauthor)

Foppa IM. An Empirical Approach to the Force of Transmission of West-Nile Virus. American Journal of Tropical Medicine and Hygiene 2003; 69 (suppl): 540. (contributed; poster)

Compton RS**&**, Wills W, **Foppa IM**. A Pilot Study Comparing Performance of Various Mosquito Traps For Arbovirus Surveillance. American Journal of Tropical Medicine and Hygiene 2003; 69 (suppl): 447. (contributed; poster)

Foppa I, Spiegelman D. Power and minimum required sample size for case-control studies of gene-environment interactions with a polytomous exposure variable. American Journal Of Epidemiology 1996; 143: 114-114 Suppl. S. (contributed; oral presenter)

Presentations (excluding abstracts listed above)

Lopez VK, Londono B, Michaels S, Caïllouet K, Loy M, Hallmark C, Estrada G, Duncan L, **Foppa IM**, Dorn P, Wesson DM. Chagas Serosurvey Near Autochthonous Human Case in Louisiana, USA. 55th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Atlanta, GA 11/12-11/15/2006 (contributed; poster)

Foppa IM. Host Mortality as an Epidemiologic Mechanism of the New World Success of West Nile Virus. 55th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Atlanta, GA 11/12-11/15/2006 (contributed; poster)

Foppa IM, Goethert HK, Spielman A, Telford SR 3rd. Basic reproductive number estimates for deer tick-borne zoonoses in the Atlantic Northeast. Presented at the 54th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Washington D.C. 12/11-12/15/2005 (contributed; oral presenter)

Foppa IM, Reddy M, Spielman A. A Method for Estimating Longevity of Culex pipiens s.l. Mosquitoes. Late breaker abstract for Annual Meeting of the American Society of Tropical Medicine and Hygiene in Miami Beach, FL, November 2004.

Foppa I, Telford III SR, Gern L. Risk of Babesia Microti Transmission By Ixodes ricinus Ticks in Eastern Switzerland. Annual Meeting, American Society of Tropical Medicine and Hygiene, Washington D.C., 2000.

Foppa I and A. Kisziewski. A Cellular Automata-based Simulation Model of Enzootic Transmission of Tick-borne Encephalitis. Annual Meeting, American Society of Tropical Medicine and Hygiene, Washington D.C., 1999.

Foppa I, Brand B, Spielman A. Serological Evidence Of Recent Emergence Of Tick-Borne Encephalitis In Eastern Switzerland. Annual Meeting, American Society of Tropical Medicine and Hygiene, Washington D.C., 1999.

Submitted Abstracts (Options for the Control of Influenza VIII, Cape Town, South Africa, 5-10 September 2013)

Foppa I, Cheng P, Shay D, Reynolds S, Carias C, Kim I, Bresee J, Fry A. Estimation of Deaths Averted by Influenza Vaccination in the U.S. during the seasons 2005/6 through 2012/13.

Haber M, An Q, **Foppa I**, Shay D, Orenstein W. A stepwise probability model for evaluating the bias and precision of influenza vaccine effectiveness estimates from observational studies.

Jackson M, McClure D, Gaglani M, Ohmit S, Zimmerman R, **Foppa I**, Fry A, Thompson M. Burden of outpatient visits due to influenza infection and cases averted by vaccination – United States, 2011/12 influenza season.

Seminars and Symposia

To Be or Not to Be or: Why Bayesian is not biased. Seminar, CEB, University of Basel, Basel, Switzerland, March, 2015.

Estimating Influenza Vaccine Prevented Deaths and Hospitalizations in the U.S. Invited speaker, Annual I-MOVE (Influenza - Monitoring Vaccine Effectiveness) Meeting, Lisbon, Portugal, July 1, 2014.

Bernoulli and the Speckled Monster - A guided tour. MInD (=CDC Modeling Infectious Disease Group) Seminar, Atlanta, GA, August 15, 2013.

Modeling (Non-) Sense: A User's Perspective. Epidemiology Department Grand Rounds Seminar Series, Rollins School of Public Health, Emory University, Atlanta, GA, September 28, 2012.

Estimation of Averted Deaths Due to Influenza Vaccination Program. Influenza Division Lab Epi Meeting, CDC, Atlanta, GA, August 23, 2012

What can we learn from statistical and mathematical models of influenza transmission? Ad-hoc Seminar, Influenza Division, CDC, Atlanta, GA, April 28, 2011.

Applied Bayesian Statistics (invited speaker. Symposium title: We are confronted by insurmountable opportunities: Novel statistics for entomologists). Entomological Society of America Annual meeting, San Diego, CA, 12/12/2010.

Bayesian statistics: A user's perspective. Department of Epidemiology Seminar Series, Tulane SPHTM, New Orleans, LA, November 22, 2010.

The Impact of West Nile Virus on the Abundance of North American Birds: A Bayesian Hierarchical Modeling Approach. Department of Epidemiology Seminar Series, Tulane SPHTM, New Orleans, LA, November 30, 2009.

West Nile Virus in North America. Lunch Seminar, Swiss Tropical Institute, University of Basel, Basel, Switzerland, July 27, 2009.

Epidemiology and Risk Factors of West Nile Fever in North America. Ad-hoc Seminar, Institute of Social and Preventive Medicine, University of Zürich, Zürich, Switzerland, July 23, 2009.

The Epidemiology of West Nile virus: What we know and what we don't. Department of Epidemiology Seminar Series, Tulane SPHTM, New Orleans, LA, March 16, 2009.

Host Density Effects on Transmission Dynamics and Virulence Evolution of West Nile Virus. Departmental Seminar Series (Departments of Pathobiological Sciences and Comparative Biomedical Sciences), School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA, October 23, 2008.

Estimating Excess Mortality due to Seasonal Influenza. Department of Epidemiology Seminar Series, Tulane SPHTM, New Orleans, LA, September 15, 2008.

A Tale of Bugs and Biases. Epidemiology Seminar Series. Department of Epidemiology Seminar Series, Tulane SPHTM, New Orleans, LA, March 11, 2007.

The Concept of the Basic Reproductive Number of Vector-Borne Diseases and its Significance for Disease Control. At the Symposiums "Quantitative Models of Vector-borne Diseases—the first 100 years", 54th An-

nual Meeting of the American Society of Tropical Medicine and Hygiene, Washington D.C. 12/14/2005 (Speaker and Symposium Organizer)

Mathematical Models of Vector-borne Diseases. Epidemiological Seminars, Department of Epidemiology and Biostatistics, November 30, 2005.

Quantitative Approaches to Infectious Disease Epidemiology. Seminars in Infectious Diseases, Arnold School of Public Health, 2003.

To Spread or Not to Spread–The Basic Reproductive Number of Vector-borne Zoonoses. Biostatistics Colloquium, Arnold School of Public Health, 2003.

Funding History

Title	Predicting vector-borne virus transmission dynamics and emergence potential
PI	Mores (project), **Foppa** (subcontract)
Funding Source	NIH Modeling of Infectious Disease Agent Systems (U01)
Total Amount	$2.5M (project), $355,145 (subcontract)
Start Date	5/1/2011
Role and % Effort	subcontract, 30%
Comment	The award was forfeited due to change in position.

To create a detailed simulation model of mosquito–borne virus transmission that will predict scenarios with a potential for emergent transmission.

Title	U19AI089696-01 Population-based approach to Malaria Research and Control
PI	Krogstad
Funding Source	NIH
Total Amount	12M
Dates	9-2010 – 8-2017
Role and % effort	Consultant in Vector Epidemiology, 5% (no salary)
Other investigators	Multiple

The goal of this research is to achieve malaria control in West and Central Africa, and ultimately in all parts of the world.

Title	Experimental and Computational Investigation of Host Density Effects on the Transmission of West Nile Virus
PI	**Foppa**
Funding Source	Tulane Research Enhancement Fund, Phase II
Total Amount	$125,000
Dates	5/2008-11/2010
Role and % Effort	PI, 30% (no salary)
Other investigators	Cortez, Wesson

To determine how bird density affects host-seeking behavior and feeding density of WNV vector mosquitoes.

Completed

Title	Serosurvey for Human Exposure to Chagas Parasites in Southern Orleans Parish

PI	Wesson
Funding Source	Tulane Research Enhancement Fund, Phase II
Total Amount	$50,000
Dates	5/2008-4/2010
Role and % Effort	Co-Investigator, 5% (no salary)
Other investigators	Dorn

To assess the local environmental risk of humans for Chagas infection in Louisiana.

Title	Risk of Mosquito-Borne Disease in Louisiana in the Wake of Hurricane Katrina
PI	**Foppa**
Funding Source	USC Vice President of Research
Total Amount	$10,000
Dates	10/2005-4/2006
Role and % Effort	PI, 10%
Other investigators	Wills

To determine whether ecological transformation after a major hurricane favors arbovirus transmission.

Title	Latitude and the Duration of Nearctic WNV Outbreaks
PI	**Foppa** (Subcontract);
Funding Source	NIH
Total Amount	$10,000 per year
Dates	5/2004-4/2005
Role and % Effort	PI, 10%
Other investigators	Project PI: Spielman.

To determine whether the hibernation stimuli for the *Culex pipiens* vector of West Nile virus is constant at different latitudes.

Title:	Transmission Dynamics of West Nile Virus in South Carolina
PI:	**Foppa**
Funding Source	Office of Research
Total Amount:	$15,000
Dates:	April 1, 2003-June 30, 2004
Role and % Effort:	PI, N/A
Other investigators:	N/A

A pilot study to explore the ecology of West Nile Virus and other mosquito-borne arboviruses in South Carolina.

Not funded (since 2008)

Title	Can Tick-Borne Encephalitis be eliminated?
PI	**Foppa**
Funding Source	NIH 2011 NIH Directors New Innovator Award Program (DP2)
Total Amount	$1.5M
Submission date	9/20/2010
Role and % Effort	PI, 40%

By accurately characterizing the web of transmission that connects ticks with mice, the proposed project addresses the important question whether this disease can be eliminated.

Title	CAREER: Empirical characterization of population-level drivers of mosquito-borne virus transmission
PI	**Foppa**
Funding Source	NSF
Total Amount	$ 742,717
Submission date	7/20/2010
Role and % Effort	PI, 25%

To examine the role of population-level drivers (immunity, heterogeneous contact rates) of arbovirus transmission.

Title	Suitability of a non-human primate model to quantify antibody-mediated transmission enhancement in heterologous dengue virus infection
PI	**Foppa**
Funding Source	Tulane National Primate Center Pilot Research Program
Total Amount	$50,000
Submission date	2/19/2010 (LOI); 5/1/2010 (Full Proposal)
Role and % Effort	PI, 30% (no salary support)

To determine whether non-human primates are suitable model organisms to address the question of transmission enhancement in secondary dengue virus infection.

Title	Epidemiological models of WNV transmission and North American bird abundance
PI	**Foppa**
Funding Source	NIH R03
Total Amount	$100,000
Submission date	10/16/2009
Role and % Effort	PI, 30%

To quantify the relationship between human WNV neuroinvasive disease and long-term population trends in birds using Bayesian hierarchical models.

Title	CAREER: Quantification of Heterogeneous Transmission of Arboviruses
PI	**Foppa**
Funding Source	NSF
Total Amount	$789,321
Submission date	7/21/2009
Role and % Effort	PI, 30%
Outcome	Not funded

To examine the role of transmission heterogeneity in the perpetuation of three prototypic arboviruses.

Title	Tick-Borne Encephalitis Immunization Coverage in Switzerland
PI	**Foppa**
Funding Source	The Tulane University Center for Infectious Diseases Beginning Investigator Award
Submission date	6/2009
Role and % Effort	PI, 25% (no salary)

To estimate the tick-borne encephalitis vaccination coverage in Switzerland.

Title	Mining User-Generated Web Content for Syndromic Surveillance

PI	Culotta
Funding Source	NIH (Challenge Grant)
Total Amount	$575,847
Other investigators	Beauboef, Kammerdiener
Submission	4/2009
Role and % Effort	Subcontract, 10%

Title	Host Density and Transmission Dynamics of Mosquito-Borne Diseases
PI	**Foppa**
Funding Source	NIH (R21)
Other investigators	Cortez (Tulane), Wesson (Tulane), Gallegos (Occidental College)
Submission	2/2009

To characterize the association between host density and per-host biting rates of ornithophilic mos-quitoes

Title	Tulane Interdisciplinary Graduate Program in Infectious Diseases—TIGPID
PI	**Foppa**
Funding Source	Burroughs Wellcome Fund
Total Amount	$2,500,000 (5 years)
Submission date	3/2008 (LOI); 5/2008 (Full Proposal)
Role and % Effort	Co-Director, 10%

To PhD students in research of infectious diseases with a broadly interdisciplinary approach that will ultimately help disease control.

Research Supervision and Teaching

Supervision of Master's Research Programs/Practica

Tulane University

Natalia Blanco	Dengue and climate (MPH thesis, 2010)
Brian Bachaus	WNV and bird mortality in Minnesota (MSc thesis, 2010)
Jym Mohler	Relative efficiencies of three collection methods for *Aedes albopictus* and *Aedes aegypti* determined by Poisson regression on mosquito survey data from uptown New Orleans in the summer of 2005 (MPH Practicum, 2008)

University of South Carolina

Kimberly Bellis	Access to Care and Influenza and Pneumococcal Vaccination among Working Age Adults (2003)
Rhonda Roberts	Predictors of Zoonotic Risk of West Nile Virus Infection in South Carolina (2004)
Amy Belflower	The United States Influenza Sentinel Provider Surveillance System: The Impact of Report Timeliness (2004)
Cathe Roseveare	Trends in Rabies Epidemiology in Appalachia I–III Health Districts (2004)
Julie Royer	Evaluation of Prophylactic versus Preemptive Approaches to Prevention of Cytomegalovirus (CMV) Disease in Liver Transplant Recipients (2005)
Krystal Hanrahan	The Effect of Insurance Type on Transfer of Care in High-Risk Neonates (2005)
Hao Zhu	Infectious Disease Epidemiology (2006-2007)

Supervision of Doctoral Research Programs

Kristina Weis	Late testing in HIV/AIDS (University of South Carolina, 2007)

Other Research Supervision

Doctoral Committee Memberships

Adam Bennett	Modeling the relationship between climate variability, vector control, and spatial and temporal patterns of malaria in Malawi and Zambia (Tulane University, Health Systems Management \ International Health and Development, 2010-11)
Rebecca Christofferson	Inter–serotypic interactions in dengue virus transmission (Pathobiological Sciences, LSU School of Veterinary Medicine, 2010–11)
Duvel White	Indoor environment, personal factors and their relationship with the risk of acute respiratory infection transmission (University of South Carolina, 2004)
Kristina Weis	Late testing in HIV/AIDS (2008–due to position change University of South Carolina to Tulane)

Courses Taught

Tulane University:

EPID 603	Epidemiologic Methods I The core course in epidemiology for all students of the School of Public Health and Tropical Medicine. Enrollment between 40 and 90 students (Spring 2008 – 2011)

University of South Carolina:

EPID 700	Introduction to Epidemiology. The core course in epidemiology for non-majors. Enrollments were 25 to 28 students.
EPID J700	Introduction to Epidemiology The core course on videotape for distance learning.
EPID 745	Seminar in Epidemiology Required course for epidemiology and biostatistics student, aiming at broadening the students' epidemiologic horizon
EPID 749	Investigative Epidemiology: Infectious Diseases (Co-taught with Dr. E. Brenner) Course introducing students to a wide variety of topics in infectious disease epidemiology
EPID 750	Methods in Infectious Disease Epidemiology Newly developed course on quantitative aspects of infectious disease epidemiology.
EPID 801	Epidemiologic Methods III. Grant writing course.

Professional, University, College and Departmental Activities

Professional Affiliations

Society of Epidemiological Research, 1996–2002
American Society of Tropical Medicine and Hygiene, 1997 – 2011
American Mosquito Control Association, 2004 – 2005
Society of Vector Ecology, 2005 – 2007

University Service

Member of Informal SARS Committee, 2003 (University of South Carolina)
Paromyscus Committee, Extra-Departmental Member, 2004 – 2007 (University of South Carolina)

School of Public Health Committees

Grievance Committee, Member, 2002 – 2007 (University of South Carolina)
Grievance Committee, Member at large, 2009 – 2011 (TUSPHTM)

Department Committees and Activities

Exam Committee, Senior Member Epidemiology, 2002 – 2005 (University of South Carolina)
Admissions Committee, Member, 2003 – 2007 (University of South Carolina)
Curriculum Committee, Member, 2005 – 2007 (University of South Carolina)
Search Committee for Molecular Epidemiology Position, 2003 – 2004 (University of South Carolina)

Review activity

Reviewed manuscripts for (since):	*American Journal of Epidemiology*	1999
	American Journal of Preventive Medicine	2015
	American Journal of Tropical Medicine and Hygiene	2011
	BMC Veterinary Research	2014
	Cancer Causes and Control	1993
	Environmental Health	2003
	European Journal of Pediatrics	2008
	Eurosurveillance	2013
	Expert Review of Vaccines	2015
	Genetic Epidemiology	2000
	Human Vaccines & Immunotherapeutics	2013
	International Journal of Biodiversity and Conservation	2013
	International Journal of Epidemiology	1999
	International Journal of Medical Microbiology	2001
	Journal of Infection and Public Health	2014
	Mathematical Biosciences	2005
	New England Journal of Medicine	2008
	PLoS Neglected Tropical Diseases	2010
	PLoS ONE	2009
	Population Health Metrics	2006
	Theoretical Biology and Medical Modelling	2014

Editorial Board:	*Infectious Disease Review*	1999–2002
Grant reviewer for:	CDC Grants for Public Health Research Dissertation (R36) ad hoc peer review panel	2008, 2009
	Cooperative Research Partnership for Biodefense– NIH/NIAID ad-hoc Study Section	2007
	Special Emphasis Panel–NIAID Center of Excellence for Influenza Research and Surveillance	2006
	Research Foundation, Autonomous Government of Trento, Italy	2003
	Swiss National Science Foundation	2000
Abstracts reviewed	APHA Epidemiology Section	2005/6

Community and other Professional Service

Co-Chair, Ectoparasite session I&II, 54th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Washington D.C. 12/11-12/15/2005.

Provided information to print media, radio and TV regarding infectious disease topic of concern (West Nile Virus, SARS, avian influenza), since 2003.

Awards

Outstanding Performance Award, Battelle, 2014: In recognition of Outstanding Contributions and Support to the Influenza Proposal Effort

First Annual Immersion Workshop in Lima, Peru, 5/2009

Brian and Heidi MacMahon Educational Fund, 1999

Financial Award, Harvard School of Public Health, Department of Epidemiology, 1997–2000

Fellowship for Advanced Researchers in Social and Preventive Medicine, Swiss National Science Foundation, 1994–1997