

CURRICULUM VITAE

- Name:** Theresa Jean Ochoa, M.D.
- Address:** Calle La Conquista 340. Casa 104. Urb. El Derby
Surco, Lima 33, Peru.
Telephone (51-1) 435-1160, Mobile (51-1) 9650-5308
Fax (51-1) 482-3404
- E- mail address:** Theresa.J.Ochoa@uth.tmc.edu
- Birth date:** November 27, 1968
- Citizenship:** Peru and United States of America
- Undergraduate Education:** 1987 – 1991. Universidad Peruana Cayetano Heredia, Lima, Peru (UPCH).
Bachelor in Science, degree in Biology.
- Graduate Education:** 1989 – 1997. Universidad Peruana Cayetano Heredia.
Alberto Hurtado School of Medicine.
Bachelor in Medicine, degree of "Médico-Cirujano" (M.D.)
- Postgraduate Training:** 1998 – 2001. Universidad Peruana Cayetano Heredia.
Alberto Hurtado School of Medicine.
Internship and Pediatric Residency
- Jan 2002 – Dec 2004. The University of Texas Medical School at Houston (UTH).
Pediatric Infectious Diseases Fellowship
- Jan 2005 – Sept 2006. Baylor College of Medicine
Baylor-Cayetano Heredia Training Program in Global Infectious Diseases.
Fogarty Postdoctoral Fellow
- Academic Appointments:** July 2005 – present. Assistant Professor of Pediatrics.
Alberto Hurtado School of Medicine, Universidad Peruana Cayetano Heredia. Lima, Perú.
- Sept 2006 – August 2012. Assistant Professor of Epidemiology. University of Texas School of Public Health. Houston, Texas.
- Sep2010- present. Adjunct Assistant Professor. The University of Texas Health Science Center – Houston.

Medical School, Department of Pediatrics, Infectious Diseases. Houston, Texas

Sept 2012-present. Associate Professor of Epidemiology. University of Texas School of Public Health. Houston, Texas.

Licensure: Colegio Médico del Perú CMP 31837, 1997
Colegio Médico del Perú RNE 16485, 2005

Professional Societies: -Pediatric Infectious Diseases Society (member since 2003)
Infectious Disease Society of America (member since 2003)
-Sociedad Peruana de Enfermedades Infecciosas y Tropicales (member since 2006)
-American Society of Tropical Medicine and Hygiene (member since 2010)
-Sociedad Peruana de Pediatría (member since 2010)

American Board Examinations: Educational Commission for Foreign Medical Graduates Certification (ECFMG): Basic Science June 1998, Clinical Science and English Examination March 1998.

Languages: Spanish and English, written and spoken fluently

Awards

1. First Place in the Area of Public Health in the V National Scientific Congress of Medical Students. Lambayeque, Perú, 1991(Educational proposal on tuberculosis)..
2. First Place in the Area of Basic Sciences and First Place Overall Award in the VI National Scientific Congress of Medical Students. Cusco, Perú,1992 (Medical plants on gastric lesions).
3. First Place in the Area of Basic Sciences in the VII National Scientific Congress of Medical Students. Arequipa, Perú, 1993 (Medical plants on gastric lesions).
4. Winner of the I Biannual "Pedro Weiss Award" for investigation by medical students in Cayetano Heredia University. Lima, Perú, 1995 (Medical plants on gastric lesions).
5. Winner of the prize "FAIF 2000" (Fondo de Apoyo al Investigador Farmaindustria). Award for scientific projects by medical residents in Perú, 2000 (*S. pneumoniae* carriers).

6. Winner of Travel Award to present research at the 11th International Conference of the International Society for Research in Human Milk and Lactation (ISRHML). Mexico, October 2002 (Enteropathogenic *E. coli* and lactoferrin).
7. Winner of Travel Grant “George McCracken Infectious Disease Fellow” to present research at the 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICCAC). Chicago, September 2003 (Enteropathogenic *E. coli* and lactoferrin).
8. Young Investigator Award. VII International Conference on lactoferrin. Hawaii, USA, October 2005 (Enterocoagulative *E. coli* and lactoferrin).
9. First Place in the XV Jornadas Científicas (Research Day) of Universidad Peruana Cayetano Heredia, for the Faculty of Medicine. Lima, September, 2005 (Enterocoagulative *E. coli* and lactoferrin).
10. Winner of the “Fondo Concursable” (University Research Support), Universidad Peruana Cayetano Heredia. Lima, December 2005 (*Salmonella typhimurium* and lactoferrin)
11. “Internacional Young Investigator Travel Award”. 44th Annual Meeting of the Infectious Diseases Society of America (IDSA). Toronto, Canada, October 12-15, 2006 (Diarrheogenic *E. coli*).
12. Annual Young Investigator Award . XVI Jornadas Científicas (Research Day). Universidad Peruana Cayetano Heredia. Lima, September, 2007.
13. Orden Cayetano Heredia, Grado de Caballero (University Honor). Universidad Peruana Cayetano Heredia. Lima, September, 2010.
14. Annual Young Investigator Award -2012. Universidad Peruana Cayetano Heredia. Lima, September, 2012. (Gestor Joven en Investigación).

Research and lab experience

1. Molecular biology laboratory, “Alexander von Humboldt” Tropical Medicine Institute, UPCH (Jan 91 – Apr 91). Molecular biology in Leishmaniasis. Advisor: Martín López, M.Sc.
2. Pharmacology laboratory, Physiology Department, UPCH (Jun 91 – Jun 93). Medical plants in cicatrization and gastric lesions. Advisor: Alfonso Zavaleta, M.D.
3. Cell biology and Virology laboratories, Microbiology Department, UPCH (Jan 92 – Jan 94). Medical plants in gastric lesions. Advisor: Abraham Vaisberg, Ph.D.

4. Microbiology laboratory, "Alexander von Humboldt" Tropical Medicine Institute, UPCH (Apr 96 – Apr 97, Nov 2000 – Nov 2001). *S. pneumoniae* cultures, sensitivity studies and serotypes. Advisor: Humberto Guerra, M.D., Ph.D.
5. Pediatric Infectious Diseases, UTH (Jan 2002 – June 2005). Pathophysiology of enteropathogens (EPEC, EAEC, STEC, *Shigella*). Advisor: Thomas Cleary, M.D.
6. Enteric Diseases and Nutrition laboratory, "Alexander von Humboldt" Tropical Medicine Institute, UPCH (June 2005 – Sep 2006). Pathophysiology of enteropathogens and clinical trials on diarrhea. Advisors: Thomas Cleary, M.D., A. Clinton White, M.D. and Herbert DuPont, M.D.

Current grant support

1. Lactoferrin for prevention of sepsis in infants. NIH (R01-1HD067694-01A1). April 2011- March 2016. Role: Principal Investigator.
2. Efficacy and safety evaluation of a purified fish protein on the nutrition of children less than 36 months of age. Fondo de la Americas (FONDAM). June 2011- May 2013. Role: Principal Investigator.
3. Furazolidone vs Ciprofloxacin for the treatment of mild and moderate dysentery in children less than 5 years of age: non-inferiority randomized clinical trial. Institutional Research Funds from the National Institute of Child Health - Peru. Sept 2011 – Aug 2013. Role: Principal Investigator.
4. Improvement of UPCH infrastructure for the development of integrated research studies on diarrheal diseases. Agencia Española de Cooperación Internacional (AECID). Jan 2009- Dec 2012. Role: Principal Investigator.

Past grant support

1. Lactoferrin for prevention of sepsis in young infants. Bill & Melinda Gates Foundation, Grand Challenges Explorations Grant (OPP1015669). May 2010 – Nov 2011. Role: Principal investigator.
2. Association between cell adhesion by EPEC strains and the severity of diarrhea. Support by "Fondo Concursable" (University Research Support), Universidad Peruana Cayetano Heredia. Jan 2011 - Dec 2012. Role: Principal Investigator.
3. Invasive pneumococcal disease in Lima (ENI-II). Wyeth Laboratories Peru. July 2009 - December 2011. Role: Principal Investigator.

4. Effect of constitutive infant formula proteins and infant formula protein supplemented with lactoferrin on enteric pathogens infection. Funds from the Mead Johnson Nutrition, Nov 2010 – Oct 2012. Rol: Principal Investigator.
5. Randomized controlled trial-lactoferrin prevention of diarrhea in children. NIH (R01-HD051716). Sep 2007 – Ago 2011. Principal Investigator: Thomas Cleary. Role: Co-Investigator.
6. Effect of lactoferrin in a murine model of ETEC infection. Universidad Peruana Cayetano Heredia, Institutional Research Funds. January 2009 – December 2010. PI: Paul Rivera. Role: mentor
7. Nasopharyngeal carriers of pneumococci in Pediatrics: Serotypes and antibiotic sensitivity. “Fondo de Apoyo a la Investigación de la Facultad de Medicina” - Institutional Research Funds. Universidad Peruana Cayetano Heredia. Jan 2009 - Dec 2009. Role: Principal Investigator.
8. Epidemiologic Study of RSV-associated Infections and Hospitalizations in Preterm Infants in Lima-Peru. Abbott laboratory. Sep 2008 – Aug 2011. Role: Principal Investigator
9. Microbiological studies for the lactoferrin clinical trial on prevention of diarrhea. Support by Mead Johnson Nutritionals. Oct 2008 – Oct 2011. Role: Principal investigator.
10. Enterovirus meningo-encephalitis in children at Hospital Nacional Cayetano Heredia de Lima. Funded by the National Institute of Health, Peru. 2008 - 2009. Principal Investigator: Ivan Espinoza. Role: co-investigator.
11. Pneumococcus serotypes in children from High-Andean regions of Peru. Universidad Peruana Cayetano Heredia, Institutional Research Funds. January 2008 – December 2010. Role: Principal Investigator.
12. Diarrhea caused by coliforms (*E. coli*) and other agents in children less than 1 year of age in Lima, Peru. Universidad Peruana Cayetano Heredia, Research Funds. December 2007 – December 2008. Role: Principal investigator.
13. SNPs in IL-8 in children with persistent diarrhea. Universidad Peruana Cayetano Heredia- School of Medicine, Research Funds. Sept 2007 – Sep 2008. Role: Mentor.
14. Nasopharyngeal carries of pneumococcus in children less than 2 years of age in Lima. Instituto Especializado de Salud del Niño-Research funds and Universidad Peruana Cayetano Heredia, Institutional Research Funds. Nov 2007 - Dec 2010. Role: Princiapal Investigator.
15. Role of virulence heterogeneity in acute and persistent EPEC diarrhea. NIH (1 K01 TW007405-01A1). Sept 2006 – Aug 2010. Role: Principal Investigator.

16. Effect of lactoferrin on *Salmonella typhimurium*. Universidad Peruana Cayetano Heredia, Research Funds. Jan 2006 – Dec 2006. Principal investigator.
17. Shigatoxin producing *E. coli* (STEC) in patients with Hemolytic Uremic Syndrome and dysentery. Universidad Peruana Cayetano Heredia- School of Medicine, Research Funds. Sept 2006 – Dec 2007. Role: Mentor.
18. Invasive pneumococcal disease in Peruvian Children. Wyeth laboratories, Peru. March 2006 – May 2008. Role: Principal Investigator.
19. Pilot study of Bovine Lactoferrin Supplementation On Prevention of Diarrhea in Children. Mead Johnson Nutritionals, USA. Jan 2006 - Jun 2007. Principal Investigator.
20. Baylor-Cayetano Heredia Training Program in Global Infectious Diseases. NIH. (1D43 TW006569-01). Jul 2005 – Sept 2006. PI: A. Clinton White Jr., M.D. Role: Fogarty Trainee.
21. Validation of a multiplex real time PCR for diarrheagenic *E. coli* on clinical samples. University of Texas, Houston. Institutional support grant. Sept 2005 – August 2006. Principal Investigator.
22. Phage induction and shigatoxin production in STEC; the role of rifaximin Salix Corp, USA. 2005 – 2006. PI: Thomas G. Cleary, MD. Role: Co-investigator.
23. Bovine Lactoferrin effect on type III secretory system. Mead Johnson Nutritionals, USA. Nov 2003 – Dec 2006 PI: Thomas G. Cleary, MD. Role: Co-investigator.

Thesis Advisor

Undergraduate students

1. Effect of lactoferrin on *Salmonella typhimurium* C52 growth. Student: Claudia Nakamatsu. Thesis for Bachelor in Biology. Univ. Federico Villareal, Lima, Peru. 2006.
2. Shigatoxin producing *E. coli* (STEC) in patients with Hemolytic Uremic Syndrome and dysentery. Students: Alejandro Llanos, Francisco Lopez and Jorge Lee. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2007
3. SNPs in IL-8 in children with persistent diarrhea. Students: Julio Carpena and Milagros Sotelo. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2008
4. Frequency of Enteroaggregative *Escherichia coli* (EAEC) in HIV pediatric patients in Lima. Student: Anicia Medina. Thesis for Bachelor in Medical Technology, UPCH. Lima, Peru. 2008

5. Effect of bovine lactoferrin in *Salmonella typhimurium* infection in mice. Student: Susan Mosquito. Thesis for Bachelor in Biology, UPCH. Lima, Peru. 2009
6. Fecal leukocytes in children infected with diarrheagenic *E. coli*. Student: Eric Mercado. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2009
7. Genotypic and phenotypic characteristics of ETEC isolated from Peruvian children. Student: Paul Rivera Thesis for Bachelor in Medical Technology, UPCH. Lima, Peru. 2009
8. Tissue culture adherence patterns of DAEC isolated from Peruvian with and without diarrhea. Student: Maribel Riveros. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2009.
9. Colostrum secretory IgA to invasive proteins of *Salmonella typhimurium*. Student: David Durand. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2010.
10. Detection of diarrheagenic *E. coli* in meat samples from 6 markets in Lima. Student: Paulo Flores. Thesis for Bachelor in Biology. Univ. Mayor de San Marcos. Lima, Peru. 2010
11. Salmonella bacteremia in children from two hospital in Lima. Students: Karen Reyes and Jesus Yesquén. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2011
12. Susceptibility profile of quinolones and nitrofurans in clinical isolates of *Shigella* spp. using MIC (Minimum Inhibitory Concentration) and Disk Diffusion. Student: Cintya Baldoce. Thesis for Bachelor in Pharmacy and Biochemistry, UPCH. Lima, Perú. 2011.
13. Secretory immunoglobulin A (sIgA) in saliva against virulence proteins of *Escherichia coli* (EPEC) in infected or colonized infants. Students: Daniela Alvarez. Thesis for Bachelor in Biology, UPCH. Lima, Perú. 2011.
14. Effect of bovine lactoferrin on biofilm formation in clinical strains of enteroaggregative *Escherichia coli* (EAEC). Students: Cecilia Coveñas, Georgette Dextre y Diana Fernandez. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2011
15. Virulence factors associated with diarrheagenic *Escherichia coli* and determination of phylogenetic group strains from children under 5 years with bacteremia in hospitals in Lima and Callao. Student: Wilfredo F. García. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2011.
16. Detection of *Escherichia coli* Shiga toxin-producing (STEC) in cattle and pig farming areas in Lima, Peru. Students: Freddy Menacho, Ingrid Morales y Evelyn Sotelo. Thesis for Bachelor in Medical Technology, UPCH. Lima, Peru. 2011.

17. Effect of bovine lactoferrin in the minimum inhibitory concentration of ampicillin and trimethoprim-sulfametaxol in clinical strains of *Shigella flexneri*. Students: Gianina Davila, Claudia Salas. Thesis for Bachelor in Medical Technology, UPCH. Lima, Peru. 2011.
18. Antimicrobial resistance of Diarrheagenic *E. coli* and commensal isolated from children, water, food and animals of a community of Lima - Norte. Students: Rosaura Bellido; Gerald Guimaraes; Carlos Huayanay. Thesis for Bachelor in Medical Technology, UPCH. Lima, Peru. 2011.
19. Effect of bovine lactoferrin on the growth curve and MIC for penicillin and ceftriaxone in infections by *Streptococcus pneumoniae*. Students: Kellie Farías, Cristian Ríos. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2011.
20. Pneumococcal Meningitis: Epidemiological, clinical and bacteriological in pediatric patients in the city of Lima. Student: Jessica Terrazas. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2009
21. Determination of biofilm formation by strains of atypical enteropathogenic *Escherichia coli* (aEPEC). Student: Daniella de la Puente. Thesis for Bachelor in Biology, UPCH. Lima, Peru. 2012.
22. Effect of protein infant formula and protein infant formula supplemented with bovine lactoferrin on in vitro infection model with enteric pathogens. Student: Victor Flores. Thesis for Bachelor in Biology, UPCH. Lima, Peru. 2012.
23. Effect of bovine lactoferrin as an adjuvant in the treatment with ampicillin in a murine model of infection with *Shigella flexneri*. Student: Fatima Saldaña. Thesis for Bachelor in Biology, UPCH. Lima, Peru. 2012.
24. Prevalence of Diarrheagenic *E. coli* in urine cultures from patients with diagnosis of urinary tract infection in HNCH. Student: Berenice Curi, Milagros Torres and Carolina Yabar. Thesis for Bachelor in Medicine, UPCH. Lima, Peru. 2012.
25. Spate gene frequency in strains of *E. coli* diffusely adherent (DAEC). Student: Karen Ocampo. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2012.
26. Phenotypic and molecular characterization of Diarrheagenic *Escherichia coli* pathotypes isolates from bacteremia. Student: Karina Acurio. Thesis for Bachelor in Biology. Univ. Federico Villareal. Lima, Peru. 2012.
27. Frequency and pathotypes of Diarrheagenic *E. coli* in patients under 5 years that require hospital care. Students: Cinthia García, Lyzbeth Luque and Andrea Montero. Thesis for Bachelor in Medicine, UPCH. Lima, Peru 2012.

Graduate students

1. Association of gene virulence heterogeneity of EPEC with diarrhea in children. Student: Carmen Contreras. Thesis for Master in Biochemistry and Molecular Biology. Univ. Mayor de San Marcos. Lima, Peru. 2009.
2. Antibiotic resistance mechanisms and phylogenetic determination of diarrheogenic and commensal *E.coli* in Peruvian children less than 2 years of age. Student: Susan Mosquito. Thesis for Master in Microbiology, UPCH. Lima, Peru. 2011
3. Antibiotic resistance mechanisms of *Shigella* strains isolated from Peruvian Children. Student: Angela Lluque, Thesis for Masters in Microbiology. Univ. Mayor de San Marcos. Lima, Peru. 2011.
4. Effect of lactoferrin in a murine model of ETEC infection. Student: Paul Rivera. Thesis for Master in Microbiology UPCH, Lima, Peru. 2011.
5. Frequency of genes in the pathogenicity island O122 of enteropathogenic *Escherichia coli* (EPEC) and its association with diarrhea in children under two years. Student: Christian Piscoche. Thesis for Master in Molecular Biology. Univ. Mayor de San Marcos. Lima, Peru. 2011.
6. Effect of bovine lactoferrin in the invasion of *Salmonella typhimurium* strain SL 1344 to HEp-2 cells. Student: Liz Barreto. Thesis for Masters in Microbiology. Univ. Mayor de San Marcos. Lima, Peru. 2011.
7. Risk factors for infection with Diarrheogenic *E. coli* in children under one year in periurban areas of Lima. Student: Lucie Ecker. Thesis for Master in Epidemiology. UPCH, Lima, Peru. 2011.
8. Evaluation of the incidence and prevalence of diarrheal disease using two definitions episode order to predict the effects on growth in children under one year. Student: Carlos Huayanay. Thesis for Master in Epidemiology. UPCH, Lima, Peru. 2012.
9. Molecular mechanisms of antibiotic resistance in strains of *Escherichia coli* (ETEC) isolated from children under 2 years in Lima, Peru. Student: Anicia Medina. Thesis for Master of Molecular Microbiology, National Administration of Laboratories and Health Institutes (ANLIS) "Dr. Carlos G. Malbrán "and Universidad Nacional de San Martín (UNSAM). Buenos Aires, Argentina, 2012.
10. Characterization of Integrons in Enterobacteriaceae. Student: Maribel Riveros. Thesis for Master in Molecular Biology. Univ. Mayor de San Marcos. Lima, Peru. 2012.
11. Quantification of enteroaggregative *Escherichia coli* (EAEC) in fecal samples. Student: David Durand. Thesis for Master in Molecular Biology. Univ. Mayor de San Marcos. Lima, Peru. 2012.

12. Association between cell adhesion strength generated by atypical EPEC strains to form the A/E lesion and the severity of diarrhea. Student: Grace Velapatiño. Thesis for Master in Biochemistry and Molecular Biology, UPCH, Lima, Peru. 2012.

Publications

Original Articles in Journals

1. Ochoa TJ. Plantas medicinales en la prevención de lesiones gástricas en ratas. SITUA -Revista de la Facultad de Medicina Humana de la Universidad Nacional de San Antonio Abad del Cusco-1993;2(2):28-32. (Medical plants in the prevention of gastric lesions in rats).
2. Ochoa TJ. Resistencia de *Streptococcus pneumoniae* a penicilina en portadores nasofaríngeos menores de 2 años. Revista Médica Herediana 1998;9(2):56-62. (Resistance of *S. pneumoniae* in nasopharyngeal carriers).
3. Gomez HF, Ochoa TJ, Herrera-Insua I, Carlin LG, Cleary TG. Lactoferrin protects rabbits from *Shigella flexneri* induced inflammatory enteritis. Infection and Immunity 2002;70(12):7050-3.
4. Gomez HF, Ochoa TJ, Carlin LG, Cleary TG. Human lactoferrin impairs virulence of *Shigella flexneri*. The Journal of Infection Diseases 2003;187:87-95.
5. Noguera-Obenza M, Ochoa TJ, Gomez HF, Guerrero ML, Herrera-Insua I, Morrow AL, Ruiz-Palacios G, Pickering LK, Guzman CA and Cleary TG. Human secretory antibodies against Attaching and Effacing *Escherichia coli* antigens. Emerging Infectious Diseases 2003;9(5):545-51.
6. Ochoa TJ, Noguera-Obenza M, Ebel F, Guzman CA, Gomez HF, Cleary TG. Lactoferrin impairs Type III Secretory System Function in Enteropathogenic *E. coli*. Infection and Immunity 2003;71(9):5149-55.
7. Ochoa TJ, Noguera-Obenza M, Cleary TG. Lactoferrin blocks the initial host cell attachment mechanism of Enteropathogenic *E. coli* (EPEC). Advances in Experimental Medicine and Biology. 2004;554:463-466.
8. Ochoa TJ and Cleary TG. Lactoferrin disruption of bacterial Type III Secretion Systems. BioMetals. 2004;17(3): 257-260.
9. Ochoa TJ, Rocio R, Guerra H, Hernandez H, Chaparro E, Tamariz J, Wanger A and Mason EO. Penicillin resistance and serotypes/serogroups of *Streptococcus pneumoniae* in nasopharyngeal carrier children younger than 2 years in Lima, Perú. Diagnostic Microbiology and Infectious Diseases. 2005;52(1):59-64.

10. Ochoa TJ, Mohr JF, Wanger A, Murphy JR and Heresi GP. Community-associated Methicillin-resistant *Staphylococcus aureus* in pediatric patients. *Emerging Infectious Diseases*. 2005;11(6):966-968.
11. Estrada-García T, Cerna JF, Pacheco-Gil L, Velázquez RF, Ochoa TJ, Torres J and DuPont HL. Drug-resistant Diarrheogenic *Escherichia coli*, Mexico. *Emerging Infectious Diseases*. 2005;11(8):1306-1308.
12. Ochoa TJ, Rojas R, Gutierrez M and Porturas D. Severe airway obstruction in a child with Pott's disease. *Pediatric Infectious Diseases Journal*, 2006; 25(7):649-51
13. Pacheco-Gil L, Ochoa TJ, DuPont HL and Estrada-García T. Enteroinvasive *Escherichia coli* severe dysentery complicated by rotavirus gastroenteritis. *J Infect*. 2006, Nov 53 (5):e211-3.
14. Ochoa TJ, Brown EL, Guion CE, Chen JZ, McMahon RJ and Cleary TG. Effect of lactoferrin on Enteroaggregative *E. coli* (EAEC). *Biochemistry and Cell Biology*, 2006;84(3):369-376.
15. Ochoa TJ, Chen JZ, Walker CM, Cleary TG. Rifaximin does not induce Shiga toxin (Stx) production or phage-mediated lysis of Shiga toxin producing *E. coli* (STEC). *Antimicrobial Agents and Chemotherapy*. 2007 Aug;51(8):2837-41.
16. Guion CE, Ochoa TJ, Walker CM, Barletta F, Cleary TG. Detection of diarrheagenic *Escherichia coli* by use of melting-curve analysis and real-time multiplex PCR. *J Clin Microbiol*. 2008 May;46(5):1752-7.
17. Ochoa TJ, Chea-Woo E, Campos M, Pecho I, Prada A, McMahon, RJ, Cleary TG. Impact of Lactoferrin Supplementation on Growth and Prevalence of *Giardia* Colonization in Children. *Clin Infect Dis*. 2008 Jun 15;46(12):1881-3.
18. Ochoa TJ, Barletta F, Contreas C, Mercado E. New insights into the epidemiology of enteropathogenic *Escherichia coli* infection. *Trans R Soc Trop Med Hyg*. 2008 Sep;102(9):852-6.
19. Ochoa TJ and Cleary TG. Effect of lactoferrin on enteric pathogens. *Biochimie*. 2009 Jan;91(1):30-4.
20. Barletta F, Ochoa TJ, Ecker L, Gil AI, Lanata CF, Cleary TG. Validation of five-colony pool analysis using multiplex real-time PCR for detection of diarrheagenic *Escherichia coli*. *J Clin Microbiol*. 2009 Jun;47(6):1915-7.
21. Ochoa TJ, Ecker L, Barletta F, Mispireta ML, Gil AI, Contreras C, Molina M, Amemiya I, Verastegui H, Hall ER, Cleary TG, Lanata CF. Age related susceptibility to infection with diarrheagenic *Escherichia coli* among infants from periurban areas in Lima, Peru. *Clin Infect Dis*. 2009 Dec 1;49(11):1694-702. PMID: 19857163

22. Ochoa TJ, Ruiz J, Molina M, Del Valle LJ, Vargas M, Gil AI, Ecker L, Barletta F, Hall E, Cleary TG, Lanata CF. High frequency of antimicrobial drug resistance of diarrheagenic *Escherichia coli* in infants in Peru. *Am J Trop Med Hyg* 2009 Aug; 81(2):296-301. PMID: 19635887
23. Contreras C, Ochoa TJ, Lacher DW, Debroy C, Navarro A, Talledo M, Donnenberg MS, Ecker L, Gil AI, Lanata CF, Cleary TG.. Allelic variability of critical virulence genes (*eae*, *bfpA*, and *perA*) in typical and atypical EPEC in Peruvian children. *J Med Microbiol*. 2010 Jan;59(Pt 1):25-31. PMID: 19797469
24. Mosquito S, Ochoa TJ, Cok J, Cleary TG. Effect of bovine lactoferrin in *Salmonella* ser. Typhimurium infection in mice. *Biometals*. 2010 Jun;23(3):515-21.
25. Medina AM, Rivera FP, Romero LM, Kolevic LA, Castillo ME, Verne E, Hernandez R, Mayor YE, Barletta F, Mercado E, Ochoa TJ. Diarrheagenic *Escherichia coli* in human immunodeficiency virus (HIV) pediatric patients in Lima, Peru. *Am J Trop Med Hyg*. 2010 Jul;83(1):158-63.
26. Garcia C, Chincha O, Leon M, Iglesias D, Barletta F, Mercado E, Ochoa T. High frequency of diarrheagenic *Escherichia coli* in human immunodeficiency virus (HIV) patients with and without diarrhea in Lima, Peru. *Am J Trop Med Hyg*. 2010 Jun;82(6):1118-20.
27. Lluque A, Mercado E, Riveros M, Alvarado L, Carlos E, Colichón A, Salazar E, Ochoa T. [Comparison of enteropathogenic *Escherichia Coli* (EPEC) diagnosis by serology and by polymerase chain reaction (PCR).] *Rev Gastroenterol Peru*. 2010 Apr-Jun;30(2):121-5.
28. Rivera FP, Ochoa TJ, Maves RC, Bernal M, Medina AM, Meza R, Barletta F, Mercado E, Ecker L, Gil AI, Hall ER, Huicho L, Lanata CF. Genotypic and phenotypic characterization of enterotoxigenic *Escherichia coli* strains isolated from Peruvian children. *J Clin Microbiol*. 2010 Sep;48(9):3198-203
29. Ochoa TJ, Rivera FP, Bernal M, Meza R, Ecker L, Gil AI, Cepeda D, Mosquito S, Mercado E, Maves RC, Hall ER, Svennerholm AM, McVeigh A, Savarino S, Lanata CF. Detection of the CS20 colonization factor antigen in diffuse-adhering *Escherichia coli* strains. *FEMS Immunol Med Microbiol*. 2010 Nov;60(2):186-9.
30. Ochoa TJ, Egoavil M, Castillo ME, Reyes I, Chaparro E, Silva W, Campos F, Sáenz A. Invasive pneumococcal diseases among hospitalized children in Lima, Peru. *Rev Panam Salud Publica*. 2010 Aug;28(2):121-7
31. Contreras CA, Ochoa TJ, Ruiz J, Lacher DW, Rivera FP, Saenz Y, Chea-Woo E, Zavaleta N, Gil AI, Lanata CF, Huicho L, Maves RC, Torres C, Debroy C, Cleary

- TG. Phylogenetic relationships of Shiga toxin-producing *Escherichia coli* isolated from Peruvian children. *J Med Microbiol*. 2011 May;60(Pt 5):639-46]
32. Mercado EH, Ochoa TJ, Ecker L, Cabello M, Durand D, Barletta F, Molina M, Gil AI, Huicho L, Lanata CF, Cleary TG. Fecal leukocytes in children infected with diarrheagenic *Escherichia coli*. *J Clin Microbiol*. 2011 Apr;49(4):1376-81.
33. Mercado E, Srinivasan V, Hawkins P, Chochua S, Ochoa T, Beall B, McGee L. First Report of *Streptococcus pneumoniae* Serotype 6D in South America. *J Clin Microbiol*. 2011 May;49(5):2080-1.
34. Ochoa TJ, Mercado EH, Durand D, Rivera FP, Mosquito S, Contreras C, Riveros M, Lluque A, Barletta F, Prada A, Ruiz J. Frequency and pathotypes of diarrheagenic *Escherichia coli* in Peruvian children with and without diarrhea. *Rev Peru Med Exp Salud Publica*. 2011 Mar;28(1):13-20.
35. Riveros M, Barletta F, Cabello M, Durand D, Mercado EH, Contreras C, Rivera FP, Mosquito S, Lluque A, Ochoa TJ. Adhesion patterns in diffusely adherent *Escherichia coli* (DAEC) strains isolated from children with and without diarrhea. *Rev Peru Med Exp Salud Publica*. 2011 Mar;28(1):21-28.
36. Hartinger SM, Lanata CF, Hattendorf J, Gil AI, Verastegui H, Ochoa T, Mäusezahl D. A community randomised controlled trial evaluating a home-based environmental intervention package of improved stoves, solar water disinfection and kitchen sinks in rural Peru: Rationale, trial design and baseline findings. *Contemp Clin Trials*. 2011 Jul 6. [Epub ahead of print]
37. Rivera FP, Ochoa TJ, Ruiz J, Medina AM, Ecker L, Mercado E, Gil AI, Huicho L, Lanata CF. Norovirus prevalence in 'pathogen negative' gastroenteritis in children from periurban areas in Lima, Peru. *Trans R Soc Trop Med Hyg*. 2011 Dec;105(12):734-6. doi: 10.1016/j.trstmh.2011.08.009. Epub 2011 Oct 2.
38. Barletta F, Ochoa TJ, Mercado E, Ruiz J, Ecker L, Lopez G, Mispireta M, Gil AI, Lanata CF, Cleary TG. Quantitative real-time polymerase chain reaction for enteropathogenic *Escherichia coli*: a tool for investigation of asymptomatic versus symptomatic infections. *Clin Infect Dis*. 2011 Dec;53(12):1223-9. Epub 2011 Oct 25.
39. Espinoza IO, Ochoa TJ, Mosquito S, Barletta F, Hernández R, Medina Mdel P, Stiglich ML, Ugarte C, Guillén D. [Enteroviral central nervous system infections in children treated at a hospital in Lima, Peru]. *Rev Peru Med Exp Salud Pública*. 2011 Dec;28(4):602-9. Spanish.
40. Mosquito S, Ruiz J, Bauer JL, Ochoa TJ. [Molecular mechanisms of antibiotic resistance in *Escherichia coli*- associated diarrhea]. *Rev Peru Med Exp Salud Publica*. 2011 Dec;28(4):648-56. Review. Spanish.

41. Pfeiffer ML, DuPont HL, Ochoa TJ. The patient presenting with acute dysentery--a systematic review. *J Infect.* 2012 Apr;64(4):374-86. Epub 2012 Jan 13.
42. Llanos A, Lee J, López F, Contreras C, Barletta F, Chea-Woo E, Ugarte C, Cleary TG, Ochoa TJ. Shiga toxin-producing *Escherichia coli* in Peruvian children with bloody diarrhea. *Pediatr Infect Dis J.* 2012 Mar;31(3):314-6.
43. Ecker L, Olarte L, Vilchez G, Ochoa TJ, Amemiya I, Gil AI, Lanata CF. Physicians' responsibility for antibiotic use in infants from periurban Lima, Peru. *Rev Panam Salud Publica.* 2011 Dec;30(6):574-9.
44. Rivera FP, Sotelo E, Morales I, Menacho F, Medina AM, Evaristo R, Valencia R, Carbajal L, Ruiz J, Ochoa TJ. Short communication: Detection of Shiga toxin-producing *Escherichia coli* (STEC) in healthy cattle and pigs in Lima, Peru. *J Dairy Sci.* 2012 Mar;95(3):1166-9.
45. Mosquito S, Zegarra G, Villanueva C, Ruiz J, Ochoa TJ. Effect of bovine lactoferrin on the minimum inhibitory concentrations of ampicillin and trimethoprim-sulfamethoxazole for clinical *Shigella* spp. strains. *Biochem Cell Biol.* 2012 Jun;90(3):412-6.
46. Ochoa TJ, Pezo A, Cruz K, Chea-Woo E, Cleary TG. Clinical studies of lactoferrin in children. *Biochem Cell Biol.* 2012 Jun;90(3):457-67. Epub 2012 Mar 1.
47. Contreras CA, Ochoa TJ, Ruiz J, Lacher DW, Durand D, Debroy C, Lanata CF, Cleary TG. Genetic diversity of LEE genes of enteropathogenic *Escherichia coli* (EPEC) isolated from Peruvian children. *J Med Microbiol.* 2012 Apr 5.
48. Mercado EH, Egoavil M, Horna SG, Torres N, Velásquez R, Castillo ME, Chaparro E, Hernández R, Silva W, Campos FE, Sáenz A, Hidalgo F, Letona C, Valencia ÁG, Cerpa R, López-de-Romaña B, Pando J, Torres B, Castillo F, Calle A, Rabanal S, Ochoa TJ. [Pneumococcal serotypes in carrier children prior to the introduction of anti-pneumococcal vaccines in Peru]. *Rev Peru Med Exp Salud Publica.* 2012 Mar;29(1):53-60. Spanish.
49. Pons MJ, Mosquito S, Ochoa TJ, Vargas M, Molina M, Lluque A, Gil AI, Ecker L, Barletta F, Lanata CF, Del Valle LJ, Ruiz J. [Levels of quinolones resistance and other antimicrobial in non-pathogenic *Escherichia coli* strains in children from the periurban area of Lima, Peru]. *Rev Peru Med Exp Salud Publica.* 2012 Mar;29(1):82-6. Spanish.
50. Riveros M, Riccobono E, Durand D, Mosquito S, Ruiz J, Rossolini GM, Ochoa TJ, Pallecchi L. Plasmid-mediated quinolone resistance genes in enteroaggregative *Escherichia coli* from infants in Lima, Peru. *Int J Antimicrob Agents.* 2012 Jun;39(6):540-2. Epub 2012 Apr 21.
51. Pantenburg B, Ochoa TJ, Ecker L, Ruiz J. Use of commercially available oral rehydration solutions in Lima, Peru. *Am J Trop Med Hyg.* 2012 Jun;86(6):922-4.

52. Ochoa TJ, Chea-Woo E, Baiocchi N, Pecho I, Campos M, Prada A, Valdiviezo G, Lluque A, Lai D, Cleary TG. Randomized Double-Blind Controlled Trial of Bovine Lactoferrin for Prevention of Diarrhea in Children. *J Pediatr*. 2012 Aug 30. [Epub ahead of print]
53. Mosquito S, Ruiz J, Pons MJ, Durand D, Barletta F, Ochoa TJ. Molecular mechanisms of antibiotic resistance in diarrhoeagenic *Escherichia coli* isolated from children. *Int J Antimicrob Agents*. 2012 Dec;40(6):544-8
54. Gomes C, Pons MJ, Magallon-Tejada A, Durand D, Lluque A, Mosquito S, Riveros M, Mercado E, Prada A, Ochoa TJ, Ruiz J. In Vitro Development and Analysis of *Escherichia coli* and *Shigella boydii* Azithromycin-Resistant Mutants. *Microb Drug Resist*. 2012 Nov 23. [Epub ahead of print].
55. Rivera FP, Medina AM, Aldasoro E, Sangil A, Gascon J, Ochoa TJ, Vila J, Ruiz J. Genotypic characterization of enterotoxigenic *Escherichia coli* strains causing traveler's diarrhea. *J Clin Microbiol*. 2012 Dec 5. [Epub ahead of print]
56. Barletta F, Ochoa TJ, Cleary TG. Multiplex Real-Time PCR (MRT-PCR) for Diarrheagenic. *Methods Mol Biol*. 2013;943:307-14. doi:10.1007/978-1-60327-353-4_21. PubMed PMID: 23104299.

Invited Articles

1. Ochoa TJ and Cleary TG. Epidemiology and spectrum of disease *E. coli* O157. *Current Opinion in Infectious Diseases* 2003;16:259-63.
2. Ochoa TJ, Salazar-Lindo E and Cleary TG. Evaluation of children with persistent infectious diarrhea. *Seminars in Pediatric Infectious Diseases*. 2004;15(4):229-236.
3. Ochoa TJ and White AC Jr. Nitazoxanide for treatment of intestinal parasites in children. *Pediatric Infectious Diseases Journal*. 2005;24(7):641-642.
4. Ochoa TJ. Vacuna contra neumococo [Pneumococcal vaccines]. *Diagnóstico*. 2010; 49(3): 118-120.
5. Ochoa TJ, Contreras C and Mosquito S. Alcances sobre la situación epidemiológica de las *E. coli* Diarreogénicas aislados de niños peruanos [Epidemiological situation of diarrheagenic *E. coli* isolated from Peruvian Children]. *Can Pediatr* 2010; 34(4): 133-138.
6. Ochoa TJ. Brote severo de *E. coli* productora de Shiga toxina (STEC) en Alemania: ¿Es el resultado de la promiscuidad de la *E. coli*? [Shiga toxin producing *E. coli* (STEC) outbreak in Germany: is the result of *E. coli* promiscuity?]. *Rev Med Hered* 2011;22(2): 45-46 (editorial).

7. Ochoa TJ, Contreras CA. Enteropathogenic *Escherichia coli* infection in children. *Curr Opin Infect Dis*. 2011 Oct;24(5):478-83.

Chapters

1. Ochoa TJ and Cleary TG. *Escherichia coli* Chapter. Nelson Textbook of Pediatrics, 17th edition. 2003.
2. Ochoa TJ and Cleary TG. *Shigella* Chapter. Oski's Pediatrics. Principles and Practice. 4th edition. 2006.
3. Ochoa TJ and Cleary TG. *Yersinia enterocolitica* Chapter. Oski's Pediatrics. Principles and Practice. 4th edition. 2006.
4. Ochoa TJ and Cleary TG. *Yersinia pseudotuberculosis* Chapter. Oski's Pediatrics. Principles and Practice. 4th edition. 2006.
5. Ochoa TJ and Cleary TG. Shigellosis Chapter, Burg et al. Current Pediatric Therapy. 18th edition. 2006.
6. Ochoa TJ and Cleary TG. Campylobacter Chapter, Burg et al. Current Pediatric Therapy. 18th edition. 2006
7. Ochoa TJ and Cleary TG. Typhoid fever Chapter, Burg et al. Current Pediatric Therapy. 18th edition. 2006.
8. Ochoa TJ and Cleary TG. Non-typhoidal Salmonellosis Chapter, Burg et al. Current Pediatric Therapy. 18th edition. 2006.
9. Ochoa TJ and Cleary TG. *Shigella*. Microbiología Clínica: lo esencial y lo práctico. 1a. edición, Organización Panamericana de la Salud, Serie Paltex, ISBN 92 75 32667 3, Washington, D. C.: OPS 2006.
10. Ochoa TJ and Cleary TG. Diarrea producida por *Escherichia coli*. Microbiología Clínica: lo esencial y lo práctico. 1a. edición, Organización Panamericana de la Salud, Serie Paltex, ISBN 92 75 32667 3, Washington, D. C.: OPS 2006.
11. Ochoa TJ and Cleary TG. *Escherichia coli* Chapter. Nelson Textbook of Pediatrics, 18th edition. 2007.
12. Ochoa TJ and Cleary TG. *Shigella* Chapter. Nelson Textbook of Pediatrics, 18th edition. 2007.
13. Ochoa TJ and Cleary TG. Yersinia. Principles and Practice of Pediatric Infectious Diseases. Long, Pickering and Prober. 3th Edition. 2008.

14. Ochoa TJ and Cleary TG. *Shigella* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 6th Edition, 2009.
15. Ochoa TJ and Cleary TG. *Salmonella* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 6th Edition, 2009.
16. Ochoa TJ and White AC. *Cryptosporidium* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 6th Edition, 2009.
17. Ochoa TJ and Miguel O’Ryan. Yersinia Chapter. Principles and Practice of Pediatric Infectious Diseases. Long, Pickering and Prober. 4th Edition. 2011.
18. Ochoa TJ, Zambruni M and Chea-Woo E. Approach to the patients with gastrointestinal tract infections and food poisoning Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 7th Edition, In Press.
19. Ochoa TJ and Kosek M. *Shigella* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 7th Edition, In Press.
20. Ochoa TJ and Santisteban J. *Salmonella* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 7th Edition, In Press.
21. Ochoa TJ and White AC. *Cryptosporidium* Chapter. Textbook of Pediatric Infectious Diseases. Feigin-Cherry. 7th Edition, In Press.

Electronic Book Capters.

1. Ochoa TJ and Cleary TG. Food poisoning in children chapper. UpToDate. Sheldon L. Kaplan, Section Editor. <http://www.uptodate.com/contents/food-poisoning-in-children>
2. Varela G, Gómez-Duarte OG and Ochoa TJ. Diarrheagenic *Escherichia coli* in children from Uruguay, Colombia and Peru, Chapter. Pathogenic Escherichia coli in Latin America. Alfredo Torres, Editor. 2010. Bentham Science Publisher. <http://www.benthamscience.com/ebooks/9781608051922/index.htm>.
3. Barletta F, Ochoa TJ and Cleary TG. Multiplex Real Time PCR (MRT-PCR) for Diarrheagenic *Escherichia coli* Chapter. Methods in Molecular Biology. John M. Walker Editor. 2009. The Humana Press Inc. Springer. <http://www.springer.com/series/7651>

Educational Videos

1. “La lactancia materna es el mejor comienzo”. (Breasfeeding is the best start). Education video for mothers: Promotion of breafeeding. Universidad Peruana Cayetano Heredia. Dec, 2012

Abstracts – Presentations

1. Alkón J, Cabello R, De Sosa J, Morán A, Ochoa T. Propuesta Educativa en Tuberculosis en base a creencias y comportamientos de la población del Asentamiento Humano Tupac Amaru. Revista Médica Herediana 1992; 3(Supl.1):3. (Educational proposal on tuberculosis, based on the knowledge and behavior of the people from poor urban areas of Lima).
2. Abarca T, Alvarado C, Castillo R, Chaparro L, De los Rios J, del Rio M, García V, Morán A, Ochoa T, Cordero L. Prevalencia de parasitosis intestinal y factores asociados en C.E. Estatal Primaria 6087 - AAHH Villa Libertad. Revista Médica Herediana 1992; 3(Supl. 1):18. (Prevalence of intestinal parasitosis and associated conditions in a grammar school of a poor urban area of Lima).
3. Ochoa T, Salas M, Villegas L, Zavaleta A, Fernandez I, Maldonado H, Vaisberg A. Evaluación de Taspina en la prevención de lesiones gástricas en ratas. Revista Médica Herediana 1994; 5(Supl.1):78. (Taspina in the prevention of gastric lesions in rats).
4. Ochoa T, Echevarria J, Chaparro E, Hernandez H, Guerra H. Resistance of *Streptococcus pneumoniae* to penicillin in nasopharyngeal carriers under 2 years of age in Lima, Perú. 37th Interscience Conference of Antimicrobial Agents and Chemotherapy (ICAAC), Toronto-Canada, 1997.
5. Castillo P, Negrón E, Verne E, Napurí N, Ochoa T, Chaparro E. Paracoccidioidomycosis: 3 casos pediátricos en el Hospital Nacional Cayetano Heredia. XXI Pediatric Peruvian Congress, Chiclayo-Perú, 2000. (Pediatric cases of Paracoccidioidomycosis).
6. Ochoa T, Rojas R, Porturas D. Obstrucción de la vía aérea por absceso mediastinal en un niño con mal de Pott. XXI Pediatric Peruvian Congress, Chiclayo-Perú, 2000. (Airway obstruction in Pott's disease).
7. Ochoa T, Hernandez H, Chaparro E, Guerra H, Mason E. *Streptococcus pneumoniae* serotypes-serogroups in nasopharyngeal carrier-children under 2 years of age in Lima, Peru. 39th Annual Meeting of the Infectious Disease Society of America (IDSA). San Francisco-USA, 2001.
8. Ochoa TJ, Noguera-Obenza M and Cleary TG. Lactoferrin blocks the initial host cell attachment mechanism of Enteropathogenic *E. coli* (EPEC). 11th International Conference of the International Society for Research in Human Milk and Lactation (ISRHML). Mexico, October 2002.
9. Ochoa TJ and Cleary TG. Lactoferrin disruption of bacterial Type III Secretion Systems. VI International Conference on Lactoferrin. Capri, Italy, May 2003.

10. Ochoa TJ, Noguera-Obenza M and Cleary TG. Lactoferrin disrupts EPEC virulence: evidence for a two step mechanism. 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAC). Chicago, September 2003.
11. Ochoa TJ, Mohr JF, Wanger A, Murphy JR and Heresi GP. Clinical Spectrum and Resistance Pattern of Community-acquired Methicillin-Resistant *Staphylococcus aureus* Infections in Hospitalized Pediatric Patients. 2004 Pediatric Academic Societies' Annual Meeting (PAS). San Francisco, May 2004.
12. Ochoa TJ, Rocio R, Guerra H, Hernandez H, Chaparro E, Tamariz J, Wanger A and Mason EO. Penicillin resistance and serotypes/serogroups of *Streptococcus pneumoniae* in nasopharyngeal carrier-children under 2 years of age in Lima, Perú. 42th Annual Meeting of the Infectious Disease Society of America (IDSA). Boston-USA, September 2004.
13. Ochoa TJ, Guion CE, McMahon RJ and Cleary TG. Bovine lactoferin inhibits adherence of Enteropathogenic *E. coli* (EAEC) to HEp-2 cells. 105th General Meeting of the American Society of Microbiology (ASM). Atlanta- USA, June 2005.
14. Ochoa TJ, Guion CE, Chen JZ, McMahon RJ, Cleary TG. Bovine lactoferri n inhibitis growth, adherence and biofilm formation of Enteroaggregative *E. coli* (EAEC). VII Internacional Conference of lactoferrin. Hawaii-USA, October 2005.
15. Ochoa TJ, Guion CE, Chen JZ, McMahon RJ and Cleary TG. Effect of bovine lactoferrin on bacterial pathogens associated with persistent diarrhea. 54th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). Washington DC-USA, December 2005.
16. Ochoa TJ, Guion CE and Cleary TG. Rapid diagnosis of diarrheagenic *E. coli* using real time multiplex PCR. 2006 Pediatric Academic Societies' (PAS) Annual Meeting in San Francisco, California, USA. April 29 – May 2, 2006.
17. Ochoa TJ, Chen J, Walker C and Cleary TG. Rifaximin does not induce Shiga toxin (Stx) production or phage-mediated lysis of Shiga toxin producing *E. coli* (STEC). 2006 Pediatric Academic Societies' (PAS) Annual Meeting in San Francisco, California, USA. April – May 2, 2006.
18. Ochoa TJ, Nakamatsu C, Zavaleta N, Valencia N, Figueroa D, Rivera J, Prada A, and Cleary T. Diarrheagenic *E. coli* in Peruvian Children with acute diarrhea. 44th Annual Meeting of the Infectious Diseases Society of America (IDSA). Toronto, Canada, October 12-15, 2006.
19. Barletta F, Mispireta M, Gil A, Amemiya I, Lanata C, Ochoa TJ. Prevalencia de las *E. coli* diarrogénicas en infantes del Cono Sur de Lima. Pediatric Meeting and International Course of Pediatrics 2007, Universidad Peruana Cayetano Heredia. Lima, April 27-28, 2007.

20. Ochoa T, Egoavil M, Reyes I, Castillo M, Chaparro E, Hernandez R, Mestanza F, Campos F, Silva W, Guerra H y Grupo Peruano de Investigación en Neumococo. Resistencia antibiótica en enfermedad neumocócica invasiva en pediatría en Lima, Perú. XII Congreso Latinoamericano de Infectología Pediátrica, SLIPE. Costa Rica, May 8-11, 2007.
21. Ochoa T, Egoavil M, Reyes I, Castillo M, Chaparro E, Hernandez R, Mestanza F, Campos F, Silva W, Morales S, Guerra H y Grupo Peruano de Investigación en Neumococo. Serotipos de *Streptococcus pneumoniae* en pacientes pediátricos con enfermedad neumocócica invasiva en Lima, Perú. XII Congreso Latinoamericano de Infectología Pediátrica, SLIPE. Costa Rica, May 8-11, 2007.
22. Barletta F, Mispireta M, Ecker L, Gil A, Amemiya I, Lanata C, Cleary C, and Ochoa TJ. Are Diarrheagenic *E. coli* Important Pathogens in Infants? 45th Annual Meeting of the Infectious Diseases Society of America (IDSA), San Diego, California, October 4-7, 2007.
23. Ochoa TJ, Egoavil M, Reyes I, Castillo M, Chaparro E, Hernandez R, Mestanza F, Campos F, Silva W, Guerra H, and the Peruvian Research Group on Pneumococcus. Invasive Pneumococcal Disease in Peruvian Children. 45th Annual Meeting of the Infectious Diseases Society of America (IDSA), San Diego, California. October 4-7, 2007.
24. Ochoa TJ, Chea E, Campos M, Pecho I, Prada A, and Cleary TG. Randomized controlled pilot study of bovine lactoferrin for prevention of diarrhea in children. VIII International Lactoferrin Conference. Nice, France. October 21-25, 2007.
25. Ruiz J, Vargas M, Ochoa TJ, Molina M, Gil A, Ecker L, Barletta F, Lanata CF, del Valle LJ. Antimicrobial resistance levels among commensal *Escherichia coli* from children under 1 year of age in Lima, Perú. European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Barcelona, Spain. April, 19-22, 2008.
26. Ochoa TJ, Vargas M, Molina M, del Valle LJ, Ruiz J, Gil A, Ecker L, Barletta F, Lanata CF. High levels of antimicrobial resistance of diarrheogenic *Escherichia coli* in Peruvian infants. European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Barcelona, Spain. April, 19-22, 2008.
27. Ochoa TJ, Chea-Woo E, Campos M, Pecho I, Prada A, McMahon RJ and Cleary TG. Effect of lactoferrin on *Giardia* burden and growth in children. 2008 Pediatric Academic Societies & Asian Society for Pediatric Research Joint Meeting. Honolulu, Hawaii, USA. May 2-6, 2008.
28. Barletta F, Ochoa TJ, Ecker L, Gil AI, Lanata CF, Cleary TG. Validation of a Multiplex Real Time PCR (MRT-PCR) for detection of Diarrheagenic *E. coli* using a pool analyses. XVII International Congress for Tropical Medicine and Malaria (ICTM). Korea, Sep 29 - Oct 3, 2008.

29. Ochoa TJ, Egoavil M, Castillo M, Reyes I, Chaparro E, Hernandez R, Silva W, Campos F, Guerra H, and the Peruvian Research Group on Pneumococcus. High Mortality Rates of Invasive Pneumococcal Disease (IPD) in Hospitalized Children in Lima, Perú. 48th Interscience Conference of Antimicrobial Agents and Chemotherapy (ICAAC) and 46th Annual Meeting of the Infectious Diseases Society of America (IDSA), Washington DC, October 25-27, 2008.
30. Ecker L, Ochoa TJ, Barletta F, Mispireta M, Gil AI, Amemiya I, Verástegui H, Hall ER, Cleary TG, Lanata CF. Age-related susceptibility to infection with diarrheagenic *E. coli*. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). New Orleans, Dec. 7-11, 2008
31. Mercado E, Cabello M, Barletta F, Ochoa TJ. Fecal leucocytes in Diarrheagenic *E. coli*. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). New Orleans, Dec. 7-11, 2008
32. Contreras CA, Ochoa TJ, Barletta F, Zavaleta N, Lanata CF, Cleary TG. Shiga toxin gene types of Shiga toxin-producing *Escherichia coli* (STEC) isolated from Peruvian children. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). New Orleans, Dec. 7-11, 2008
33. Medina A, Rivera F, Romero L, Barletta F, Kolevic L, Castillo M, Verne E, Mayor Y, Ochoa TJ. Diarrheagenic *E. coli* in Peruvian children with HIV. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). New Orleans, Dec. 7-11, 2008
34. Lluque A, Contreras C, Llanos A, Lee J, Lopez F, Prada A, Chea E, Ochoa TJ. Antimicrobial resistance of clinical strains of *Shigella spp* isolated from Peruvian children with diarrhea. 50^o Annual Meeting of the European Society for Pediatric Research. Hamburg, Alemania. October 09-12, 2009.
35. Contreras, CA, Ochoa TJ, Lacher DW, Lanata CF, Donnemberg MS, and Cleary TG. Allele variability of critical virulence genes in typical and atypical EPEC in Peruvian children. 50^o Reunión anual del European Society for Pediatric Research. Hamburg, Alemania. 09 al 12 de Octubre 2009.
36. Ochoa TJ, Chea E, Pecho I, Prada A, Baiocchi N, Campos M and Cleary TG. Implementation of a community-based clinical trial of lactoferrin for prevention of diarrhea in children. IX International Lactoferrin Conference. Beijing, China . October 18-22, 2009.
37. Mosquito S, Ochoa TJ, Cok J, and Cleary TG. Effect of bovine lactoferrin in *Salmonella ser Typhimurium* infection in mice. IX International Lactoferrin Conference. Beijing, China . October 18-22, 2009.
38. Rivera FP, Bernal M, Ochoa TJ, Meza R, Barletta F, Mercado E, Riveros M, Cepeda D, Maves R, Hall E, Svennerholm AM, Lanata CF. Identification of colonization factor antigen in non-enterotoxigenic *E. coli* strains. 58th Annual

Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). Washington D.C., USA. November 18-22, 2009.

39. Mosquito SG, Pons MJ, Ochoa TJ, Maves RC, Ruiz J. Role of Efflux pumps in the development of quinolone-resistance in Peruvian *Escherichia coli* isolates. 14th International Congress of Infectious Diseases (ICID). Miami, United States March, 9-12, 2010.
40. Pons MJ, Mosquito SG, Mercado EH, Ochoa TJ, Ruiz T. Estudio de mecanismos de resistencia a quinolonas en *Escherichia coli* aislados en niños (con o sin diarrea) menores de 1 año en Lima, Peru. XIV Congreso de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC). Barcelona, Spain. May, 19-21, 2010.
41. Pantenburg B, Ecker L, Ruiz J, Ochoa TJ. Evaluation of caregivers' practices, knowledge and beliefs regarding nutrition and rehydration of young children with diarrhea in Lima, Peru from December 2009 to March 2010. European Public Health Association. 10-13 November 2010, Amsterdam, Netherlands.
42. Pantenburg B, Ecker L, Ruiz J, Ochoa TJ. Nutrition of young children during diarrheal episodes. American Society of Tropical Medicine and Hygiene. 59th Annual Meeting. Atlanta, United States November 3-7, 2010
43. Ecker L, Ochoa TJ, Ruiz J, Vargas M, Del Valle LJ. Caretakers knowledge, attitudes and practices about antibiotic use in children in a setting where antibiotics are available without medical prescription. American Society of Tropical Medicine and Hygiene. 59th Annual Meeting. Atlanta, United States November 3-7, 2010
44. Lluque A, Mosquito SG, Prada A, Durand D, Mercado EH, Contreras C, Ochoa TJ, Ruiz J. Antimicrobial susceptibility, mechanisms of resistance and virulence factors of *Shigella* strains isolated from Peruvian children. American Society of Tropical Medicine and Hygiene. 59th Annual Meeting. Atlanta, United States November 3-7, 2010
45. Mosquito SG, Pons MJ, Maves RC, Saenz Y, Mercado EH, Vargas M, del Valle LJ, Torres C, Ochoa TJ, Ruiz J. Prevalence of Extended Spectrum Beta-Lactamases in *Escherichia coli* strains isolated from Peruvian infants. 20th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Vienna, Austria. April, 10-13, 2010.
46. Contreras CA, Ruiz J, Rivera FP, Sáenz Y, Zavaleta N, Lanata CF, Maves R, Torres C, Cleary TG, Ochoa TJ. Serotypes, virulence genes, and PFGE patterns of Shiga toxin-producing *Escherichia coli* (STEC) isolated from Peruvian children. 20th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Vienna, Austria. April, 10-13, 2010.
47. Pons MJ, Mosquito SG, Mercado E, Rivera FP, Maves RC, Del Valle LJ, Vargas M, Ochoa TJ, Ruiz J. Quinolone resistance mechanisms in *Escherichia coli* isolated

- from children (with or without diarrhoea) under 1 year in Lima, Perú. 20th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Vienna, Austria. April, 10-13, 2010.
48. Mosquito S, Zegarra G, Villanueva C, Ruiz J, Ochoa TJ. Effect of bovine lactoferrin on the minimum inhibitory concentrations of ampicillin and trimethoprim – sulfamethoxazol for clinical *Shigella* spp. strains. Xth International Lactoferrin Conference. Mazatlan, Mexico. May 8-12, 2011.
 49. Ochoa TJ, Zegarra J, Bellomo S, Rospigliosi M, Cam L, Llanos R, Bautista R., Davila C, Campos C, Cleary TG. Lactoferrin for prevention of infections in small children and neonates. Xth International Lactoferrin Conference. Mazatlan, Mexico. May 8-12, 2011.
 50. Lluque A, Ruiz J, Prada A, Ochoa TJ. Prevalence of cytolethal distending toxin (cdtABC) Virulence gen in *Campylobacter* spp. Isolated from diarrheal and control cases in Peruvian children under 2 years of age. . 21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Milan, Italy. May, 7-10, 2011.
 51. Lluque A, Ruiz J, Prada A, Ochoa TJ. Frecuency of virulence genes among different species of *Shigella* isolated from peruvian children under 2 years of age. 21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Milan, Italy. May, 7-10, 2011.
 52. Piscoche N, Contreras C, Durand D, Ruiz J, Cleary TG, Ochoa TJ. Prevalence of O122 genes in Enteropathogenic *Escherichia coli* (EPEC) strains isolated from Peruvian children. 21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Milan, Italy. May, 7-10, 2011.51.
 53. Rivera FP, Ochoa TJ, Ruiz J, Medina AM, Ecker L, Gil AI, Huicho L, Lanata CF. Norovirus prevalence in “pathogen negative” gastroenteritis in Peruvian Children. . 21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Milan, Italy. May, 7-10, 2011.
 54. Durand D, Rivera F, Mercado E, Ruiz J, Ochoa T. High diversity of aggregative adherence fimbriae (AAF) in Enteroaggregative *Escherichia coli* (EAEC) strains isolated from Peruvian children. 21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Milan, Italy. May, 7-10, 2011.
 55. Gomes C, Durand D, Lluque A, Mosquito SG, Prada A, Ochoa TJ, Ruiz J. Analisis de los mecanismos de resistencia a azitromicina en aislados clínicos de *Escherichia coli* y *Shigella* spp. De Lima, Perú. XV Congreso Nacional de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC). Málaga, España, June 1-4. 2011.
 56. Gomes C, Durand D, Lluque A, Mosquito SG, Prada A, Ochoa TJ, Ruiz J. Desarrollo de mutantes de *Escherichia coli* y *Shigella* spp. Resistentes a

azitromicina: frecuencia de selección, estabilidad y mecanismos de resistencia Perú. XV Congreso Nacional de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC). Málaga, España, June 1-4. 2011.

57. Durand D, Bellomo S, Barletta F; Cleary T, Ochoa T. Detection of secretory immunoglobulin A (sIgA) in human colostrum as mucosal immune response against proteins of the type three secretion system (TTSS) of Enteropathogenic *Escherichia coli* (EPEC), *Salmonella* and *Shigella*. Symposium of *E. coli* and the Mucosal Immune System (ECMIS). Ghent, Belgium. July, 2-5, 2011.
58. Durand D, Alvarez D, Diaz D, Barletta F; Cleary T, Ochoa T. Secretory immunoglobulin A (sIgA) in saliva against virulence proteins of *Escherichia coli* (EPEC) in infected or colonized infants. Symposium of *E. coli* and the Mucosal Immune System (ECMIS). Ghent, Belgium. July, 2-5, 2011.
59. Riveros M, Riccobono E, Pallecchi L, Durand D, Mosquito S, Ruiz J, Ochoa T, Gotuzzo E, Rossolini G. Plasmid-Mediated Quinolone Resistance (PMQR) Genes in Enteroaggregative *Escherichia coli* (EAEC) from Infants in Lima, Peru. 51th Interscience Conference of Antimicrobial Agents and Chemotherapy (ICAAC), Chicago (EEUU). September 2011.
60. Garcia W, Riveros M, Garcia C, Durand D, Mosquito S, Mercado E, Rivera F, Ruiz J, Ochoa T.J. Detection of virulence genes associated with diarrheagenic *E. coli* (DEC) in *E. coli* strains isolated from bacteremia in Peruvian children. 7th European Congress on Tropical Medicine and International Health (ECTMIH). Barcelona (España). October 2011
61. Barletta F, Lluque A, Cleary T, Ochoa T. Detection of *Campylobacter spp.*, *Salmonella spp.*, and *Shigella spp.* enteropathogens by Real-Time Multiplex PCR. 7th European Congress on Tropical Medicine & International Health (ECTMIH). Barcelona, Spain. October, 3-6, 2011.
62. Mosquito S, Riveros M, Pons MJ, Ochoa T.J., Ruiz J. Diarrheogenic *Escherichia coli* phylogeny and its association with clinical data of the diarrhea episode. 60th Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH). Philadelphia, Dec. 4-8, 2011
63. Ochoa T.J., Chaparro E., Hernandez R., Roetter M., Silva W., del Aguila O., Sáenz, A., Campos F., Reyes I., Rodriguez E., Sedano K., Mercado E.H., Castillo M.E. Invasive pneumococcal diseases among hospitalized adult patients in Lima, Perú. 8th International Symposium on Pneumococci and Pneumococcal Diseases. Iguazu Falls, Brazil. March 11-15, 2012.
64. Ochoa T.J., Chaparro E., Hernandez R., Castillo M.E., Rodriguez E., Silva W., del Aguila O., Roetter M., Reyes I., Sáenz A., Campos F., Sedano K., Mercado E.H. Comparison of vaccine serotype distribution among invasive pneumococcal diseases strains isolated from children between 2006-2008 and 2009 -2011 in

- Lima, Perú. 8th International Symposium on Pneumococci and Pneumococcal Diseases. Iguazu Falls, Brazil. March 11-15, 2012.
65. Mercado E.H., Hawkins P., Chochua S., Beall B., Ochoa T.J., Castillo M.E., Reyes I., Chaparro E., McGee L. Serotype and genotype distributions among invasive pneumococcal isolates recovered from Peruvian children. 8th International Symposium on Pneumococci and Pneumococcal Diseases. Iguazu Falls, Brazil. March 11-15, 2012.
66. Mercado E.H., Chochua S., Hawkins P., Beall B., Castillo M.E., Chaparro E., Hernández R., Silva W., Campos F.E., Sáenz A., McGee L., Ochoa T.J. Carriage of pneumococci in Peruvian children prior to PCV7 vaccine introduction (2007-2009). 8th International Symposium on Pneumococci and Pneumococcal Diseases. Iguazu Falls, Brazil. March 11-15, 2012.
67. Gomes C, Durand D., Lluque A., Mosquito S.G., Prada A., Ochoa T.J., Ruiz J. Development of azithromycin resistant-mutant of *Escherichia coli* and *Shigella* spp in presence of Phe-arg-beta-naphthylamide. 22 European Congress of Clinical Microbiology and Infectious Diseases. Londres (Gran Bretaña). 31 March - 3 April, 2012.
68. Gomes C., Durand D., Lluque A., Mosquito S.G, Prada A., Ochoa T.J., Ruiz J. Analysis of the mechanisms of resistance to azithromycin and its transferability in clinical isolates of *Escherichia coli* and *Shigella* spp. clinical isolates from Lima, Peru. . 22 European Congress of Clinical Microbiology and Infectious Diseases. Londres (Gran Bretaña). 31 March - 3 April, 2012.
69. Rivera F., Medina A., Sotelo E., Morales I., Menacho F., Riveros M., Ruiz J., Ochoa TJ. Comparative analysis of Shiga toxin-producing *Escherichia coli* isolates from humans and animals in Peru. 22 European Congress of Clinical Microbiology and Infectious Diseases. London, Great Britain. 31 March - 3 April, 2012.
70. Ochoa TJ et al. Lactoferrin for the prevention of sepsis in Peruvian neonates. Pediatric Academic Societies meeting (PAS), Boston, May 2012
71. Ochoa TJ et al. Lactoferrin for the prevention of diarrhea – a randomized double blind control study. Pediatric Academic Societies meeting (PAS), Boston, May 2012
72. Gomes C, Pons MJ, Ruiz L, Mercado EH, Ochoa TJ, Ruiz J. Mecanismos de resistència a rifaximina en soques d'*Escherichia coli* comensals i diarrogèniques de nens de Lima, Perú. Global Questions on Advanced Biology. Barcelona, Spain, 9-12 July 2012.
73. Martinez-Puchol S., Gomes C., Pons M.J, Ochoa T.J., Ruiz J.. Desenvolupament i anàlisi de mutants de *Escherichia coli* i *Shigella* spp. resistents a furazolidona. Global Questions on Advanced Biology. Barcelona, Spain, 9-12 July 2012

74. Rivera F.P., Medina A.M., Gamarra J.J., Bernal M., Meza R., Ruiz J., Maves R.C., Ochoa T.J. Effect of bovine lactoferrin on the binding of *in vivo E. coli*-produced heat-labile enterotoxin to GM1-ganglioside receptor. 16th International Society for research in human milk and lactation (ISRHML) Conference. Trieste, Italy. 28 September - 1 October, 2012
75. Ochoa TJ et al. Lactoferrin for the prevention of severe infections in Peruvian children. 16th International Society for research in human milk and lactation (ISRHML) Conference. Trieste, Italy. 28 September - 1 October, 2012
76. Ecker L., Ochoa T.J., Vargas M., del Valle L.J., Ruiz J. Prevalence of purchase of antibiotics without prescription in children under 5 in private pharmacies close to primary care centers in peri-urban areas of Lima, Peru. 61th Annual Meeting. of the American Society of Tropical Medicine and Hygiene. Atlanta, November 11–15, 2012.
77. Ecker L., Ochoa T.J., Vargas M., del Valle L.J., Ruiz J. Practices of antibiotic use in children less than five of medical personnel in primary care centers in peri-urban areas of Lima, Peru. 61th Annual Meeting. of the American Society of Tropical Medicine and Hygiene. Atlanta (E.E.U.U.) November 11–15, 2012.
78. Durand D., Cleary TG. Bellomo SME., Ochoa TJ. Presence of mucosal immune memory in colostrum against bacteria associated with cellular invasion. International colloquium “Pathogen’s survival strategies – from fundamentals to field”. Antwerp, Belgium. 02-05 December, 2012.

Selected invited lectures

1. Effect of lactoferrin in pediatric infections. Pediatric Grand Rounds. University of Texas School of Medicine, Department of Pediatrics. Houston, Texas. August 24, 2010.
2. Role of Lactoferrin on Pediatric Infections. 15th International Conference of the International Society for Research in Human Milk and Lactation (ISRHML). Lima, Peru, October 8-11, 2010.
3. Bovine lactoferrin decreases cholera-toxin-induced intestinal fluid accumulation in mice. Xth International Conference on Lactoferrin: Structure, Function and Applications (X ICL) Mazatlan, México, May 8-12, 2011.
4. Challenges in the management of diarrhea in Latin America, with particular emphasis to the situation in Perú. 7th European Congress on Tropical Medicine & International Health (ECTMIH). Barcelona. Spain. October 3-6, 2011

TEACHING ACTIVITIES

Graduate programs

1. Houston Initiative for Global Health, Education, and Research (HIGHER) Fellowship (Fogarty Grant). Univ. of Texas School of Public Health and Baylor College of Medicine (Beatrice J. Selwyn, PI). Advisor for MPH students for a 6-8 weeks rotation in Lima, Peru, for field studies on child global health. Student supervised:
 - Jennifer Harper, 2007
 - Vanessa Gartrell, 2009
2. Global Health Program at the University of Texas Medical Branch at Galveston (Clinton White). Advisor for medical students for a 6-8 weeks rotation in Lima, Peru, for field studies on child global health. Student received:
 - Sigrid Nasser, 2010
 - Seth Clark, 2010
 - Janna Ludwick, 2010
 - Phillip Scott, 2011
 - Betsy Escobar, 2011
 - Samir Hassan, 2011
 - Jaggi Sonam, 2011
3. Pediatric Course I and II, for 3th and 4th year Medical Students at Cayetano Heredia Medical School. Two lectures and 8 tutorial sessions per semester. Lima Peru, 2006 – present.
4. Tropical Medicine and Infectious Diseases course for 4th year Medical Students at Cayetano Heredia Medical School. One lecture and 6 tutorial sessions per year. Lima, Peru, 2008- present
5. The Gorgas Course in Clinical Tropical Medicine, University of Alabama at Birmingham and Cayetano Heredia University. David O. Freeman, Course Director. Lima, Peru, 2006 – Present. <http://gorgas.dom.uab.edu/>
Lectures:
 - Management of Diarrhea in children in developing countries
 - Pneumonia in children in resource limited situations
 - Shigella and Campylobacter
 - Neonatal mortalitySmall session workshops:
 - Children malnutrition.

Tutor for clinical rounds in the Hospital (in the Gorgas Diploma Course and Gorgas Expert Course).

6. Master program in Control of Infectious and Tropical Diseases. Universidad Peruana Cayetano Heredia. 2008-present. Lectures:
 - Diarrhea in children. Control of infectious diseases in pediatrics course.
 - Management of human resources. Fundamentals of control course
7. Seminars in Global Health. Cayetano Heredia University School of Public Health. Lima. 2009 – present. Lecture:
 - Child Health and Survival.
8. Maternal and Child Health Concentration. Univ. Texas School of Public Health. Student advisor (Silvia M. Brandt). 2011
9. Symposium in Pediatric Global Infectious Diseases. Sponsored by the University of Texas School of Public Health and the Division of Pediatric Infectious Diseases, UT Medical School. May 2012.

COMMUNITY ACTIVITIES

During Medical School and training:

1. Founding member and First President of the Cayetano Heredia Medical Students' Scientific Society (SOCEMCH) (Jul 92 – Jul 93).
2. International Liaison for Chile, Bolivia and Perú of the Latinamerican Federation of Medical Students' Scientific Societies (FELSOCEM) (Aug 92 – Aug 93).
3. President of the Latinamerican Federation of Medical Students' Scientific Societies (FELSOCEM) (Aug 93 – Aug 94).

As professional and Faculty

1. Medical Rural Service of Perú. Voluntary physician for a small hospital and an outpatient clinic in Urubamba, Cusco, in the Andes of Perú. (May 97 – Mar 98).
2. Voluntary physician for Mama Alice Foundation, Non-governmental organization that works to improve the quality of life of street children in developing countries. In Peru Mama Alice Foundation works in Ayacucho (May 2005 – present).
3. Founding member of Grupo Peruano de Investigación en Neumococo (GPIN) (Peruvian Research Group on Pneumococcus). Lima, Perú (Jan 2007 – present).
4. Member of the Steering Committee of the Peruvian Society of Infectious Diseases and Tropical Medicine (Sociedad Peruana de Enfermedades Infecciosas y Tropicales, SPEIT), Lima, Peru (Sept 2007 – Sept 2009)
5. Member of the Advisory Committee for the National Program of Immunizations of the Peruvian Ministry of Health. Lima, Peru (Jan 2007 – Dec 2011).