

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Ricardo Esteban Gürtler	Full Professor (University of Buenos Aires) and Principal Scientific Investigator at Argentina National Council of Scientific Investigations and Technology (CONICET, Argentina)

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
University of Buenos Aires, Argentina	B.Sc.	1981	Biology
University of Buenos Aires, Argentina	Ph.D.	1988	Population Ecology, Epidemiology, Parasitology

RESEARCH AND PROFESSIONAL EXPERIENCE:

Employment:

2010- Full Professor. Department of Ecology, Genetics and Evolution. Faculty of Exact and Natural Sciences, University of Buenos Aires; Buenos Aires, Argentina. Head of Laboratory of Eco-Epidemiology.
1998- Associate (1998-2001), Independent (2001-2009) and Principal (2009-) Scientific Investigator at National Council of Scientific and Technical Investigations (CONICET, Consejo Nacional de Investigaciones Cientificas y Técnicas), Argentina.
2001-2010, Associate Professor. Department of Biological Sciences. Faculty of Exact and Natural Sciences, University of Buenos Aires; Buenos Aires, Argentina. Head of Laboratory of General Ecology.
1990-2001, Assistant Professor. Department of Biological Sciences. Faculty of Exact and Natural Sciences, University of Buenos Aires; Buenos Aires, Argentina. Head of Laboratory of General Ecology.
1998-2000, Scientific advisor in biological investigations, National Administration of Laboratories and Health Institutes "Dr Carlos G. Malbrán", Argentina Ministry of Health, Buenos Aires, Argentina.
1983-90. Teaching and research assistant, General Parasitology. Department of Biological Sciences. Faculty of Exact and Natural Sciences, University of Buenos Aires; Buenos Aires, Argentina.

Other positions:

Associate Editor, PLoS Neglected Tropical Diseases (2008-) and BMC Infectious Diseases (2009-).
Adjunct Professor, University of Illinois at Urbana-Champaign, College of Veterinary Medicine, 2006-2007.
Chairman (2003-06) and Member (2002) of Steering Committee for Operational Research on Chagas Disease, Tropical Disease Research (WB/UNDP/WHO).
Member, Technical Advisory Committee of the Federal Chagas Program of Argentina, Federal Ministry of Health of Argentina, 2006-2008.
Temporary Advisor to PAHO on Chagas disease vector control (2002, 2004-06).
Scientific advisor to the National Committee of Zoonoses, Argentina Ministry of Health, 1995-1998.
Guest Investigator, Rockefeller University (New York, USA), Laboratory of Populations, January-August 1994, February-July 1996, March-May 2000, February 2001, March-April 2002, March-May 2003.

Honors:

- 1) Fulbright Scholarships for Investigators, Fulbright Commission (USA), July 1995.
- 2) Thalmann Scholarship, University of Buenos Aires, for research and teaching in a foreign institution, August 1995.
- 3) Fred L. Soper Prize 1997, awarded by Pan American Health and Education Foundation (Washington DC, USA), PAHO, November 1997. Co-Authors: Cecere MC, Gürtler RE, Canale D, Chuit R, Cohen JE.

Selected Relevant Publications:

Gürtler RE, Cécere MC, Rubel, DN, Petersen RM, Schweigmann NJ, Lauricella MA, Bujas MA, Segura EL & Wisnivesky-Colli C. Chagas disease in north-west Argentina: infected dogs as a risk factor for the domestic transmission of *Trypanosoma cruzi*. *Trans R Soc Trop Med Hyg* 85, 741-745, 1991.

Gürtler RE, Cécere MC, Petersen RM, Rubel DN & Schweigmann NJ. Chagas disease in north-west Argentina: association between *Trypanosoma cruzi* parasitaemia in dogs and cats and infection rates in domestic *Triatoma infestans*. *Trans R Soc Trop Med Hyg* 87, 12-15, 1993.

Gürtler RE, Petersen RM, Cecere MC, Schweigmann NJ, Chuit R, Gualtieri JM & Wisnivesky-Colli C. Chagas disease in north-west Argentina: risk of domestic reinfestation by *Triatoma infestans* after a single community-wide application of deltamethrin. *Trans R Soc Trop Med Hyg* 88, 27-30, 1994.

Gürtler RE, Chuit R, Cecere MC & Castañera MB. Detecting domestic vectors of Chagas disease: a comparative trial of six methods in north-west Argentina. *Bull World Health Organization* 73, 487-494, 1995.

Gürtler RE, Cecere MC, Castañera MB, Canale DN, Lauricella MA, Chuit R, Cohen JE & Segura EL. Probability of infection with *Trypanosoma cruzi* of the vector *Triatoma infestans* fed on infected humans and dogs in northwest Argentina. *Am J Trop Med Hyg* 55, 24-31, 1996.

Gürtler RE, Cohen JE, Cecere MC & Chuit R. Shifting host choices of the vector of Chagas disease *Triatoma infestans* in relation to the availability of hosts in houses in north-west Argentina. *J Appl Ecol* 34, 699-715, 1997.

Gürtler RE, Cohen JE, Cecere MC, Chuit R & Segura EL. Influence of humans and domestic animals on the household prevalence of *Trypanosoma cruzi* in *Triatoma infestans* populations in northwest Argentina. *Am J Trop Med Hyg* 58, 748-758, 1998.

Gürtler RE, Cecere MC, Canale D, Castañera MB, Chuit R & Cohen JE. Monitoring house reinfestation by vectors of Chagas disease: a comparative trial of detection methods during a four-year follow-up. *Acta Trop* 72, 213-234, 1999.

Segura EL, Cura EN, Sosa Estani S, Andrade J, Lansetti JC, De Rissio AM, Campanini A, Blanco SB, Gürtler RE, Alvarez M. Long-terms effects of a nation-wide control program on the seropositivity for *Trypanosoma cruzi* infection in young men from Argentina. *Am J Trop Med Hyg* 62: 353-362, 2000.

Cohen JE & Gürtler RE. Modeling household transmission of American Trypanosomiasis. *Science* 293: 694-698, 2001.

Gürtler RE, Segura EL, Cohen JE. Congenital transmission of *Trypanosoma cruzi* infection in Argentina. *Emerging Infectious Diseases* 9:29-32, 2003.

Cecere MC, Canale DM, Gürtler RE. Effects of refuge availability on the population dynamics of *Triatoma infestans* in central Argentina. *J Appl Ecol* 40: 742-756, 2003.

Gürtler RE, Canale DM, Spillmann C, Stariolo R, Salomón OD, Blanco S, Segura EL. Effectiveness of residual spraying with deltamethrin and permethrin on peridomestic populations of *Triatoma infestans* in rural western Argentina: a district-wide randomized trial. *Bull World Health Organ* 82, 196-205, 2004.

Gürtler RE, Cecere MC, Lauricella MA, Petersen RM, Canale D, Castañera MB, Chuit R, Segura EL & Cohen JE. Incidence of *Trypanosoma cruzi* infection among children following domestic reinfestation after insecticide spraying in rural northwestern Argentina. *Am J Trop Med Hyg* 73:95-103, 2005.

Vazquez-Prokopec GM, Cecere MC, Canale DM, Gürtler RE, Kitron U. Spatiotemporal patterns of reinfestation by *Triatoma guasayana* (Hemiptera: Reduviidae) in a rural community of northwestern Argentina. *J Med Entomol* 42: 573-581, 2005.

Gurevitz JM, Ceballos LA, Kitron U, Gürtler RE. Flight initiation of *Triatoma infestans* (Hemiptera: Reduviidae) under natural climatic conditions. *J Med Entomol* 43: 143-150, 2006.

Reithinger R, Ceballos L, Stariolo R, Davies CR and Gürtler RE. Extinction of experimental *Triatoma infestans* populations following continuous exposure to dogs wearing deltamethrin-treated collars. *Am J Trop Med Hyg* 74: 766-771, 2006.

Vazquez-Prokopec GM, Ceballos LA, Marcet PL, M.C. Cecere, Cardinal MV, Kitron U, Gürtler RE. Seasonal variations in active dispersal of natural populations of *Triatoma infestans* in rural north-western Argentina. *Med Vet Entomol* 20: 1-6, 2006.

Cecere MC, Vazquez-Prokopec GM, Gürtler RE, Kitron U. Reinfestation sources for Chagas disease vector, *Triatoma infestans*, Argentina. *Emerg Inf Dis* 12: 1096-1102, 2006.

Cardinal MV, Castañera MB, Lauricella MA, Cecere MC, Ceballos LA, Vazquez-Prokopec GM, Kitron U, Gürtler RE. A prospective study of the effects of sustained vector surveillance following community-wide insecticide application on *Trypanosoma cruzi* infection of dogs and cats in rural northwestern Argentina. *Am J Trop Med Hyg* 75: 753-761, 2006.

Gürtler RE, Cecere MC, Lauricella MA, Cardinal MV, Kitron U, Cohen JE. Domestic dogs and cats as sources of *Trypanosoma cruzi* infection in rural northwestern Argentina. *Parasitology* 134: 1-14, 2006.

Ceballos LA, Cardinal MV, Vazquez-Prokopec GM, Lauricella MA, Orozco MM, Cortinas R, Schijman AG, Levin MJ, Kitron U, Gürtler RE. Long-term reduction of *Trypanosoma cruzi* infection in sylvatic mammals following deforestation and sustained vector surveillance in northwestern Argentina. *Acta Trop* 98: 286–296, 2006.

Gürtler RE, Kitron U, Cecere MC, Segura EL, and Cohen JE. Sustainable vector control and management of Chagas disease in the Gran Chaco, Argentina. *Proc Natl Acad Sci US* 104: 16194-16199, 2007.

Tarleton RL, Reithinger R, Urbina JA, Kitron U, Gürtler RE. The challenge of Chagas disease – grim outlook or glimmer of hope? (letter). *PLOS Medicine* 4: 1852-1857, 2007.

Gürtler RE, Ceballos LA, Stariolo R, Kitron U, Reithinger R. Effects of topical application of fipronil spot-on on dogs against the Chagas disease vector *Triatoma infestans*. *Trans. R. Soc. Trop. Med. Hyg* 103: 298-304, 2009.

Vazquez-Prokopec GM, Spillmann C, Zaidenberg M, Kitron U, Gürtler RE. Cost-effectiveness of vector control strategies against *Triatoma infestans* in rural northwestern Argentina. *PLoS Neglected Tropical Diseases*, 3: e363, 2009.

Reithinger R, Tarleton RL, Urbina JA, Kitron U, Gürtler RE. Eliminating Chagas disease: challenges and a roadmap. *British Medical Journal* 338: 1044-1047, 2009.

Gürtler RE, Garelli FM, Coto HD. Effects of a five-year intervention program to control *Aedes aegypti* infestations and prevent dengue outbreaks in northern Argentina. *PLoS Neglected Tropical Diseases* 3: 427, 2009.

Gürtler RE, Ceballos LA, Ordóñez-Krasnowski P, Lanati LA, Stariolo R, Kitron U. Strong host-feeding preferences of the Chagas disease vector *Triatoma infestans* modified by vector density: implications for the epidemiology of Chagas disease. *PLoS Neglected Tropical Diseases*, 3: e447, 2009.

Gürtler RE. Sustainability of vector control strategies in the Gran Chaco region: current challenges and possible approaches. *Mem. Inst. Oswaldo Cruz* 104 (Suppl. 1): 52-59, 2009.

Piccinali RV, Canale DM, Sandoval AE, Cardinal MV, Jensen O, Kitron U, Gürtler RE. *Triatoma infestans* bugs in southern Patagonia. *Emerg. Inf. Dis.* 16: 887-889, 2010.

Main funding

National Institutes of Health/National Science Foundation (USA), 2002-2007, extended 2008-2010, “Eco-epidemiology of Chagas disease in northern Argentina”. PI, Uriel Kitron (University of Illinois at Urbana-Champaign, Emory). Co-PI, R.E. Gürtler. UBA subcontract, US\$ 560,000.

International Development Research Center (Canada) (2007-2009) “An ecosystem perspective of the process of reinfestation by *Triatoma infestans* in rural communities of the Gran Chaco ecoregion (Argentina, Bolivia y Paraguay)”. PI, R.E. Gürtler. Canad\$ 220,000.

Tropical Disease Research (TDR/WHO/UNICEF/PNUD) (2008-2011) “Sources of reinfestation by major vectors of Chagas disease after residual insecticide spraying” (Argentina, Bolivia, Brasil and Paraguay). PI, R.E. Gürtler. US\$ 632,000.

Chapters in books

Tobar F, Gürtler RE, Yadón ZE, Medici AM. Introducción. En: Decentralización y gestión del control de las enfermedades transmisibles en América Latina. Yadón ZE, Gürtler RE, Tobar F, Medici AM, eds. Organización Panamericana de la Salud, Buenos Aires, 2006.

Gürtler RE. Eco-epidemiología regional de la transmisión vectorial: Enfermedad de Chagas en el Gran Chaco. In: La enfermedad de Chagas. A la puerta de los 100 años del conocimiento de una endemia americana ancestral. Balance y futuro, 1909-2006. Chagas, hacia el Siglo XXI. Silveira AC, editor. Organización Panamericana de la Salud-Fundación Mundo Sano, Buenos Aires, 2007.