

BIOGRAPHICAL SKETCH

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NAME: Contreras Molina de Rivera, Carmen Lucía

eRA COMMONS USERNAME (credential, e.g., agency login): clcontreras

POSITION TITLE: Regional laboratory coordinator, VIHCA

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Universidad del Valle de Guatemala	Bachelor +1	11/2003	Biochemistry
Universidad del Valle de Guatemala	Diplomate	12/2011	Field Epidemiology
Universidad del Valle de Guatemala	Master	11/2017	Field Epidemiology Training Program, FETP
CITI Program	NA	11/2024	GCP for Clinical Trials with Investigational Drugs and Biologics (ICH Focus)
Universidad del Valle de Guatemala	NA	11/2025	Community Researchers Training

A. Personal Statement

I began my career in 2004 at the Center for Health Studies (CES), Universidad del Valle de Guatemala (UVG), participating in research on malaria, Chagas disease, and arboviruses, with experience in molecular and serological pathogen detection. From 2010 to 2019, I worked in a public health surveillance system in Guatemala for bacterial, parasitic, and viral diseases, collaborating with the Centers for Disease Control and Prevention (CDC), the Infectious Emerging Diseases Program (IEIP), and the Ministry of Public Health. My work focused on respiratory diseases, through which I developed expertise in sample handling, protocol implementation, and molecular biology techniques—particularly real-time PCR—as well as in the proper storage and shipment of biological specimens.

Since 2020, I have been working on the regional HIV project (VIHCA) at CES-UVG, a CDC PEPFAR implementing partner, providing technical support to Ministries of Health in Guatemala, El Salvador, Honduras, Nicaragua, and Panama to strengthen diagnostic and monitoring services across the HIV care continuum. In this role, I have developed expertise in laboratory quality management and led the implementation of strategies to expand coverage of viral load, CD4, and opportunistic infection testing. I have also contributed to building the technical capacity of healthcare and laboratory personnel performing HIV testing. Additionally, I have established strong collaborative partnerships with Ministry counterparts throughout Central America and Panama, supporting sustainable improvements in HIV diagnostic services.

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

2024 – Present	Technical Consultant. American Society for Microbiology (ASM). Global Public Health Programs.
2021 – Present	Regional Laboratory Coordinator. VIHCA, Regional HIV Program. Universidad del Valle de Guatemala CES/UVG
2020 – 2021	Laboratory Quality Management Advisor. HIV Central American Regional Program. Center for Health Studies, Universidad del Valle de Guatemala CES/UVG
2010 – 2020	Senior Research Assistant, Molecular Biology Laboratory, Infectious Emerging Diseases Program (IEIP). Universidad del Valle de Guatemala CES/UVG
2018 – 2020	College Professor. Universidad del Valle de Guatemala
2017 – 2018	Senior Research Assistant. Project: Household air pollution and health: a multi-center intervention with liquefied petroleum gas stoves (HAPIN). Universidad del Valle de Guatemala CES/UVG
2009 – 2010	Technical Commercial Representative AGQ-Disagro Services, Disagro de Guatemala.
2004 – 2009	Research Assistant, Arbovirology Laboratory, Regional office for Central America and Panama, CDC/CAP. Universidad del Valle de Guatemala CES/UVG
2004 – 2005	Research Assistant, Chagas Disease Laboratory, Center for Health Studies/ Medical Entomology Unit – CDC – Universidad del Valle de Guatemala

Honors

2001	Honor Student. Biochemistry, Universidad del Valle de Guatemala.
2011	Honor Student. Field Epidemiology Diplomate

C. Contributions to Science

Peer-Reviewed Publications (in chronological order)

1. Estevez A, Rios L, **Contreras CL**, et al. Evaluation of three methods to isolate *Trypanosoma cruzi* from opossums in sylvatic and peridomestic environments in Guatemala. *American Journal of Tropical Medicine and Hygiene*. 2005; 73(6):258-268.
2. Wortham JM, Gray J, Verani J, **Contreras CL**, et al. Using Standardized Interpretation of Chest Radiographs to Identify Adults with Bacterial Pneumonia-Guatemala, 2007-2012. *PloS One*. 2015; 10(7): e0133257.
3. **Contreras CL**, Verani JR, et al. Incidence of Hospitalized Pneumococcal Pneumonia among Adults in Guatemala, 2008-2012. *PLoS One* 2015;10(10): e0140939. PMID: 4619266.
4. Tomczyk S, McCracken JP, **Contreras CL**, et al. Factors associated with fatal cases of acute respiratory infection (ARI) among hospitalized patients in Guatemala. *BMC Public Health* (2019) 19:499.
5. Adolphe Ndikubwimana; Bonnie N. Young; William Checkley; **Carmen Lucía Contreras**; Anaité A. Diaz; et al. Association between personal exposure to household air pollution and glycated hemoglobin among women in rural areas of Guatemala, India, Peru and Rwanda. *J Health Pollution*. 2025; 13(1-4):017002.
6. Adolphe Ndikubwimana; William Checkley; **Carmen Lucía Contreras**, et al. Exposure–response relationship of household air pollution on body mass index among women in rural areas of Guatemala, India, Peru and Rwanda: household air pollution intervention network trial. *BMC Public Health*. (2025) 25:2163.