Who's Who in One Health

One Health Unit, School of Public Health and Administration Universidad Peruana Cayetano Heredia

Lima, Peru

1. **Organization/ Group Name and website url:**

   One Health Unit, School of Public Health and Administration, Universidad Peruana Cayetano Heredia.

   http://www.upch.edu.pe/faspa/index.php/en/unidad-de-una-salud

2. **Description and Scope of One Health Activities:**

   The One Health Unit is based within the School of Public Health and Administration in the Universidad Peruana Cayetano Heredia, Lima, Peru. The One Health Unit comprises a diverse mix of national and international researchers interested in the interaction between human, animal and environmental health and how improved health can be achieved through the study of One Health.

   The aims of this unit are to:

   (i) develop research projects of the highest calibre in the areas of Public Health, Epidemiology and Ecology, focusing on the intersection of human health with animal health and the environment (One Health);

   (ii) promote teaching and learning opportunities, especially through the creation of internships for students at our satellite headquarters in Arequipa;

   (iii) provide guidance to undergraduate and graduate students, especially those pursuing their thesis in One Health topics;

   (iv) develop collaborative studies with other researchers both within and outside the Universidad Peruana Cayetano Heredia.

3. **Key Collaborators / Participants and contact information** (Email address, Telephone, and if they agree to share contact information on this posting in case One Health stakeholders want to contact them)

Unit Coordinator: Valerie A. Paz Soldán, PhD, MPH.
vpazsold@tulane.edu / +51 (1) 418-7404 (NB: Telephone number for the Health Office for Latin America where Dr. Paz-Soldan is usually based).

- Associate Investigator, Universidad Peruana Cayetano Heredia
- Associate Professor, Department of Global Community Health and Behavioral Sciences, Tulane School of Public Health and Tropical Medicine
- Director, Tulane Health Office for Latin America

Dr. V Paz-Soldan is happy to share this contact information on this posting

Research Team:

Michael Z. Levy, PhD	Associate Professor	Department of Biostatistics & Epidemiology University of Pennsylvania
Alison Buttenheim, PhD, MBA	Associate Professor	Department of Family and Community Health University of Pennsylvania
Cesar Naquira, MD	Profesor Investigador	Universidad Peruana Cayetano Heredia
Ricardo Castillo Neyra, PhD, DVM, MSPH	Scientific Director – Zoonotic Disease Research Lab	Universidad Peruana Cayetano Heredia
Stella Hartinger, PhD, MSc.	Unit head Environment, Development and Health Unit	Universidad Peruana Cayetano Heredia

4. **Type of Organization:**

Academic Institution

5. **Address of Organization/ Group**:

SOUTH CAMPUS: Av. Armendáriz 445, Miraflores, Lima, Peru, LIMA 18
NORTH CAMPUS: Av. Honorio Delgado 430, Urb. Ingeniería - San Martín de Porres, Lima, Peru, LIMA 31

6. **Sources of funding for Organization/Group**

Activities in this unit are funded by various international research grants. Past and current funding includes National Institute of Health (USA), The Inter-American Institute for Global Change Research and the University of Pennsylvania (USA).

We will continue to seek funding which fit the mission of the unit and specific project objectives.

7. **One Health Course/Certificate/Training Offered by Organization or Group**
   Title of Course/Certificate/Training:
   Contact person's name and email:
   Link to informational web page:

8. **Other One Health Activities/Initiatives**
   (Symposiums, Summits, Workshops, Discussion Series, etc)
   Title/description of program:
   Contact person's name and email:
   Link to program informational web page:

9. **Brief History of Your Organization's One Health Involvement**

10. **Additional Information**
    (Include whatever else you would like to have posted about your Institution's / Organization's One Health efforts)

    Projects and activities to date include:

    1. **"Improving participation in door-to-door vector control campaigns**" - This project, funded as an R01 by the NIH (USA), is based on years of Chagas studies in Arequipa, Peru. For this project we carried out fieldwork with three interventions to increase participation in vector control campaigns carried out by the Ministry of Health (MINSA), using informed strategies in the field of "behavioral economics" (behavioral change using incentives and economic strategies). "Disrupting Vector Borne Disease Transmission in Complex Urban Environments". This project, funded as an R01 by the NIH (USA), is based on years of Chagas studies in Arequipa, Peru. We use mathematical modeling to infer non-observed spatial processes that contribute to uncertainty in the collection of spatial data - in order to improve the control of vector-borne diseases.
    2. **"The effect of anthropogenic disturbance of habitats on the dynamics of the rodent population and the risk of disease transmission"** - This project, funded by the Inter-American Institute for Global Change Research, aims to study the impact of the construction of the interoceanic highway that crosses Madre de Dios and the health of the communities along this highway, with a focus on transmission of pathogens from rodents to humans and vulnerabilities of the communities due to the change in land use.
    3. **"Training studies to improve participation in rabies control programs" -** This pilot project in Arequipa, funded by the University of Pennsylvania, has several components, all related to understanding the urban transmission of canine rabies and designing strategies for its control. We studied behavior of dogs (in movement, ecology) and humans (reasons to vaccinate or not), through observation, surveys, focus groups, and the use of GPS in dog collars.
    4. Collaborations with other institutions in the development and implementation of joint studies. At present, we are collaborating with the University of Tulane, the University of Pennsylvania, the PRISMA Beneficiary Association, NAMRU-6 and other institutions, for the development of research studies as part of the unit's activities.
    5. Development of 'Apps' (electronic applications) for the epidemiological control of vector diseases.

6. Preparation of publications for indexed international journals. The collaborators in this unit have more than 100 publications in indexed international journals, and at least 20 more in preparation for the coming year.
    a. Examples of recent publications include,

Paz-Soldán VA, Bauer KM, Hunter GC, **Castillo-Neyra R,** Arriola VD, Rivera-Lanas D, Rodriguez GH, Toledo Vizcarra AM, Mollesaca Riveros LM, **Levy MZ, Buttenheim AM.** To spray or not to spray? Understanding participation in an indoor residual spray campaign in Arequipa, Peru. Global Public Health. Published online 17 May 2016. Access

Castillo-Neyra R, Levy MZ, Náquira C. Efecto del sacrificio de perros vagabundos en el control de la rabia canina. Revista Peruana de Medicina Experimental y Salud Pública Vol 33 – 2016. Access

Castillo-Neyra R, Borrini Mayorí K, Salazar Sánchez R, Ancca Suarez J, Xie S, **Náquira Velarde C, Levy MZ.** Heterogeneous infectiousness in guinea pigs experimentally infected with Trypanosoma cruzi. Parasitology International, Volume 65, Issue 1, Pages 50-54. Access

Paz Soldan VA, Yukich J, Soonthorndhada A, Giron M, Apperson CS, Ponnusamy L, Schal C, Morrison AC, Wesson DM. Design and testing of novel lethal ovitrap to reduce populations of Aedes mosquitoes: community based participatory research between industry, academia and communities in Peru and Thailand. PLoS ONE, 2016 Aug 17;11(8):e0160386. doi: 10.1371/journal.pone.0160386. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27532497

Salmon-Mulanovich G, Powell AR, **Hartinger SM,** Schwarz L, Bausch DG, **Paz-Soldan VA.** Community perceptions of health and rodent-borne diseases along the interoceanic highway in Madre de Dios, Peru. BMC Public Health, 2016 Aug 9;16:755. doi: 10.1186/s12889-016-3420-3. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27506539

Perkins TA, **Paz-Soldán VA,** Stoddard ST, Morrison AC, Forshey BM, Long KC, Halsey ES, Kochel TJ, Elder JP, Kitron U, Scott TW, Vazquez-Prokopec G. Calling in sick: impacts of fever on intra-urban human mobility. Proceedings of the Royal Society B, 2016 Jul 13;283(1834). pii: 20160390. doi: 10.1098/rspb.2016.0390. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27412286

Paz-Soldán VA, Bauer K, Lenhart A, Cordova Lopez JJ, Elder JP, Scott TW, McCall PJ, Kochel TJ, Morrison AC. Experiences with insecticide-treated curtains: a qualitative study in Iquitos. BMC Public Health, 2016 Jul 16;16:582. doi: 10.1186/s12889-016-3191-x. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27422403

Paz-Soldán VA, Cordova Lopez JJ, Bauer K, Izumi K, Morrison AC, Scott TW, Elder JP, McCall PJ, Alexander N, Halsey ES, Lenhart A. Factors associated with correct and consistent insecticide treated curtain use in Iquitos, Peru. PLoS Neglected Tropical Diseases, 2016 March 11, 10(3):e0004409. doi: 10.1371/journal.pntd.0004409. Available at: https://www.ncbi.nlm.nih.gov/pubmed/26967157