

SUPPLEMENTARY MATERIAL

Appendix 1. Characteristics of the original publications with first author affiliated to the Instituto Nacional de Salud, period 1998-2018

Characteristics	First author affiliated to INS		Proportion ratio (95%CI)
	Yes n (%)	No n (%)	
Period			
1998-2008 (n = 233)	145 (62.2)	88 (37.8)	1.52 (1.30 a 1.77)
2009-2018 (n = 385)	158 (41.0)	227 (58.9)	1
International collaboration			
No (n = 378)	249 (65.9)	129 (34.1)	2.93 (2.29 a 3.74)
Yes (n = 240)	54 (22.5)	186 (77.5)	1
National collaboration			
No (n = 192)	138 (71.9)	54 (28.1)	1.86 (1.60 a 2.15)
Yes (n = 426)	165 (38.7)	261 (61.3)	1
Number of author signatures			
Single (n = 13)	13 (100.0)	0	1
2 to 5 (n = 307)	192 (62.5)	115 (37.5)	0,63 (0,57 a 0,68)
6 to 10 (n = 212)	85 (40.1)	127 (59.9)	0,40 (0,34 a 0,47)
Over 10 (n = 86)	13 (15.1)	73 (84.9)	0,15 (0,09 a 0,25)
Number of institutional signatures			
Only INS (n = 122)	122 (100.0)	0	1
2 to 3 (n = 294)	138 (46.9)	156 (53.1)	0.47 (0.42 a 0.53)
4 to 5 (n = 131)	36 (27.5)	95 (72.5)	0.27 (0.21 a 0.36)
6 or more (n = 71)	7 (9.9)	64 (90.1)	0.09 (0.05 a 0.19)
Type of journal			
National (n = 346)	226 (65.3)	120 (34.7)	2.31 (1.88 to 2.83)
Foreign (n = 272)	77 (28.3)	195 (71.7)	1
Publication in RPMESP			
Yes (n = 283)	201 (71.0)	82 (29.0)	2.33 (1.95 to 2.79)
No (n = 335)	102 (30.5)	233 (69.5)	1

RPMESP: Revista Peruana de Medicina Experimental y Salud Pública

Appendix 2. Number of collaborating institutions and co-authors according to country of origin, in original publications with the participation of the Instituto Nacional de Salud, period 1998-2018

Country	Number of Institutions	Number of co-authors	Country	Number of Institutions	Number of co-authors
Peru	182	2679	Belgium	3	28
USA	68	806	Costa Rica	3	24
Brazil	30	395	Dominican Republic	3	12
Argentina	25	113	Cuba	2	16
Ecuador	18	81	French Guyana	2	6
Colombia	17	67	Bangladesh	1	2
Spain	17	85	Belize	1	2
Mexico	15	35	Cameroon	1	1
Chile	12	46	Germany	1	2
Bolivia	10	34	Guatemala	1	2
Japan	9	88	Honduras	1	2
United Kingdom	9	47	Hong Kong	1	1
Uruguay	7	32	India	1	1
Venezuela	7	35	Israel	1	3
Paraguay	6	15	Laos	1	8
Switzerland	6	14	Nicaragua	1	4
France	5	23	South Korea	1	1
Italy	5	16	Taiwan	1	2
Holland	5	11	Thailand	1	3
Panama	5	19	Trinidad y Tobago	1	3
Canada	4	25			

One author was found to have an institutional affiliation with no identifiable country of origin.

Appendix 3. Thirty institutions with the greatest number of collaborations with the Instituto Nacional de Salud by author signatures, period 1998-2018

Institutional Signature	Country of origin	Number of collaborations ^a
Universidad Nacional Mayor de San Marcos	Peru	319
Universidad Peruana Cayetano Heredia	Peru	307
Centers for Disease Control and Prevention	USA	274
Centro Médico Naval de Destacamento de Investigación ^b	Peru	217
Universidade Federal de Minas Gerais	Brazil	208
Ministerio de Salud de Perú	Peru	167
Oficina General de Epidemiología ^c	Peru	114
Dirección Regional de Salud de Loreto	Peru	97
Pan American Health Organization	USA	78
Organización No Gubernamental de Desarrollo Humano PRISMA	Peru	65
Partners In Health	Peru	60
Universidad Peruana de Ciencias Aplicadas	Peru	57
Universidade Federal do Acre	Brazil	55
University of Maryland School of Medicine	USA	55
Dirección Regional de Salud de Ucayali	Peru	50
Brigham and Women's Hospital	USA	48
Hospital Nacional Hipólito Unanue	Peru	44
Hospital Nacional Dos de Mayo	Peru	43
Dirección Regional de Salud de Callao	Peru	42
Instituto Nacional de Salud del Niño	Peru	40
University of Oklahoma	USA	40
Instituto Oswaldo Cruz-Fiocruz	Brazil	39
Hospital Nacional Docente Madre Niño San Bartolomé	Peru	38
University of California	USA	38
Dirección de Salud V Lima Ciudad	Peru	35
Dirección Regional de Salud de San Martín	Peru	35
Hospital Nacional Edgardo Rebagliati Martins	Peru	30
University of Texas	USA	28
Hokkaido University	Japan	24
Instituto Nacional de Enfermedades Infecciosas ANLIS Carlos Malbrán	Argentina	24

^a Number of co-authorships with the institutional signature

^b Currently called Naval Medical Research Unit Six (NAMRU-6)

^c Currently called Centro Nacional de Prevención y Control de Enfermedades del Perú

Appendix 4. Publication-citation matrix for original publications with at least one author affiliated with the Instituto Nacional de Salud, period 1998-2018

Year	Number of original publications	Year of citation																			Total de citaciones ^a	
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		2018
1999	1	0	1	2	1	1	2	1	1	2	1	3	1	1	1	2	0	1	0	0	0	21
2000	2		0	1	0	0	1	1	3	2	2	0	0	1	0	0	1	0	1	0	0	13
2001	2			0	0	0	0	0	0	0	2	0	0	1	0	1	0	1	0	0	0	5
2002	6				0	0	1	0	2	0	1	0	1	0	4	3	2	0	2	1	0	17
2003	9					7	21	19	22	15	21	17	15	31	18	26	18	13	19	13	10	285
2004	7						2	12	10	15	13	21	15	14	23	12	7	14	13	11	10	192
2005	7							8	22	26	31	29	22	27	23	13	21	13	16	16	12	279
2006	6								1	10	14	10	12	15	3	6	11	9	6	5	7	109
2007	11									4	15	13	18	19	20	16	18	8	18	8	10	167
2008	14										9	33	52	59	38	38	45	44	29	27	26	400
2009	30											8	47	59	67	71	61	53	47	47	34	494
2010	30												13	48	63	73	84	76	81	66	69	573
2011	33													26	83	89	95	95	84	104	84	660
2012	30														16	42	59	52	52	69	67	357
2013	37															13	74	81	95	133	78	474
2014	43																31	71	107	96	96	401
2015	46																	52	155	188	157	552
2016	38																		18	68	74	160
2017	25																			4	32	36
2018	30																				11	11
Citations received during the year ^b		0	1	3	1	8	27	41	61	74	109	134	196	301	359	405	527	583	743	856	777	5026

^a Number of citations received for articles published in a given year; ^b number of citations for articles in a citation year

Appendix 5. Original publications with the participation of the Instituto Nacional de Salud with 40 or more citations in the period 1998-2018

Number	Title of the publication	Year of publication	Number of citations ^a	Journal	Author order number with INS affiliation
1	International study to evaluate PCR methods for detection of <i>Trypanosoma cruzi</i> DNA in blood samples from Chagas disease patients	2011	176	PLoS Neglected Tropical Diseases	12
2	Clinical spectrum of pulmonary involvement in leptospirosis in a region of endemicity, with quantification of leptospiral burden	2005	141	Clinical Infectious Diseases	7
3	Reassessment of the taxonomic status of <i>Amblyomma cajennense</i> (Fabricius, 1787) with the description of three new species, <i>Amblyomma tonelliae</i> n. sp., <i>Amblyomma interandinum</i> n. sp. and <i>Amblyomma patinoi</i> n. sp., and reinstatement of <i>Amblyomma mixtum</i> Koch, 1844, and <i>Amblyomma sculptum</i> Berlese, 1888 (Ixodida: Ixodidae)	2014	141	Ticks and Tick-borne Diseases	4
4	Arboviral etiologies of acute febrile illnesses in western south America, 2000-2007	2010	119	PLoS Neglected Tropical Diseases	4,11
5	Subsistence strategies in traditional societies distinguish gut microbiomes	2015	99	Nature Communications	13,14
6	Effect of vitamin D supplementation during pregnancy on maternal and neonatal outcomes: A systematic review and meta-analysis of randomized controlled trials	2015	91	Fertility and Sterility	3,4
7	Waist circumference, body mass index, and other measures of adiposity in predicting cardiovascular disease risk factors among peruvian adults	2011	85	International Journal of Hypertension	6
8	Chloroquine-resistant <i>Plasmodium vivax</i> malaria in Peru	2003	84	American Journal of Tropical Medicine and Hygiene	6,7,8
9	Asymptomatic renal colonization of humans in the Peruvian Amazon by <i>Leptospira</i>	2010	75	PLoS Neglected Tropical Diseases	4
10	Timely diagnosis of MDR-TB under program conditions: Is rapid drug susceptibility testing sufficient?	2006	62	International Journal of Tuberculosis and Lung Disease	1,3
11	Emergence of asiatic vibrio diseases in south america in phase with El Niño	2008	59	Epidemiology	2,3
12	Association of intimate partner physical and sexual violence with unintended pregnancy among pregnant women in Peru	2008	59	International Journal of Gynecology and Obstetrics	2
13	Major Cardiovascular Risk Factors in Latin America: A Comparison with the United States. The Latin American Consortium of Studies in Obesity (LASO)	2013	59	PLoS ONE	8
14	<i>Amblyomma cajennense</i> (Fabricius, 1787) (Acari: Ixodidae), the Cayenne tick: Phylogeography and evidence for allopatric speciation	2013	58	BMC Evolutionary Biology	7
15	Prevalence, types, and pattern of intimate partner violence among pregnant women in Lima, Peru	2009	52	Violence Against Women	4
16	Systematic relationships among <i>Lutzomyia</i> sand flies (Diptera: Psychodidae) of Peru and Colombia based on the analysis of 12S and 28S ribosomal DNA sequences	2004	50	International Journal for Parasitology	2
17	Analytical validation of quantitative real-time PCR methods for quantification of <i>trypanosoma cruzi</i> DNA in blood samples from chagas disease patients	2015	48	Journal of Molecular Diagnostics	17
18	Overweight and obesity: Prevalence and determining social factors of overweight in the Peruvian population (2009-2010) [Sobrepeso y obesidad: Prevalencia y determinantes sociales del exceso de peso en la población peruana (2009-2010)]	2012	48	Revista Peruana de Medicina Experimental y Salud Publica	1,2,3,4
19	Validation of a rapid method for detection of <i>M. tuberculosis</i> resistance to isoniazid and rifampin in Lima, Peru	2005	47	International Journal of Tuberculosis and Lung Disease	1
20	Human <i>Mycobacterium bovis</i> infection in ten Latin American countries	2008	46	Tuberculosis	12,13
21	Epidemiologic surveillance of nosocomial infections in a Pediatric Intensive Care Unit of a developing country	2010	45	BMC Pediatrics	3,6
22	Endemic Venezuelan Equine Encephalitis in Northern Peru	2004	45	Emerging Infectious Diseases	24
23	Confirmation of rubella within 4 days of rash onset: Comparison of rubella virus RNA detection in oral fluid with immunoglobulin M detection in serum or oral fluid	2009	45	Journal of Clinical Microbiology	2,7,8
24	Preclinical assessment of the neutralizing capacity of antivenoms produced in six Latin American countries against medically-relevant <i>Bothrops</i> snake venoms	2010	45	Toxicon	7,15
25	Comparative analysis of the diagnostic performance of six major <i>Echinococcus granulosus</i> antigens assessed in a double-blind, randomized multicenter study	2005	45	Journal of Clinical Microbiology	8,9
26	Interethnic differences in the accuracy of anthropometric indicators of obesity in screening for high risk of coronary heart disease	2009	44	International Journal of Obesity	7
27	Population-based surveillance and a case-control study of risk factors for endemic lymphocutaneous sporotrichosis in Peru	2003	43	Clinical Infectious Diseases	2,3,7
28	Effect of pyrazinamidase activity on pyrazinamide resistance in <i>Mycobacterium tuberculosis</i>	2009	43	Tuberculosis	6
29	Plasma cholinesterase levels and health symptoms in peruvian farm workers exposed to organophosphate pesticides	2008	43	Archives of Environmental Contamination and Toxicology	3
30	South American <i>plasmodium falciparum</i> after the malaria eradication era: Clonal population expansion and survival of the fittest hybrids	2011	41	PLoS ONE	6,7,11
31	Transmission of Multidrug-Resistant and Drug-Susceptible Tuberculosis within Households: A Prospective Cohort Study	2015	41	PLoS Medicine	12,13
32	<i>Mycobacterium tuberculosis</i> strains of the Beijing genotype are rarely observed in tuberculosis patients in South America	2008	40	Memorias do Instituto Oswaldo Cruz	7
33	Dengue virus serotype 4, northeastern Peru, 2008	2009	40	Emerging Infectious Diseases	11
34	Prognostic accuracy of clinical prediction rules for early post-pulmonary embolism all-cause mortality: A bivariate meta-analysis	2015	40	Chest	4
35	Usefulness of neutrophil-to-lymphocyte ratio in risk stratification of patients with advanced heart failure	2015	40	American Journal of Cardiology	1

^a Citations received on Scopus as of October 2019