

Research projects funded by federal funds of the United States of America, through contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and National Institute of Health (NIH) and universities of the United States of America, respectively, for the period from 1 January 2020 to 31 December 2020.



Research projects funded by federal funds of the United States of America, through contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and National Institute of Health (NIH) and universities of the United States of America.

Audit Report to the Statements of Expenditures for the period from 1 January 2020 to 31 December 2020.

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US\$ = U.S. dollar



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## I. INDEPENDENT AUDITOR'S REPORT

To the Members of the University Council of Universidad Peruana Cayetano Heredia

1. We have audited the Statements of Expenditures of seventy eight Research Projects (hereinafter referred to as the Projects) of **Universidad Peruana Cayetano Heredia** (an educative non-profit entity), which are funded by federal funds of the United States of America, through contracts and subcontracts between Universidad Peruana Cayetano Heredia and the National Institute of Health (hereinafter referred to as NIH) and other Universities of the United States of America, respectively, for the period from 1 January 2020 to 31 December 2020.

## Reponsibility of the Administration Directorate General for the Statements of Expenditures

2. The Administration Directorate General of **Universidad Peruana Cayetano Heredia** is responsible for the preparation and reasonable presentation of these Statements of Expenditures in accordance with the execution/expense basis. This responsibility includes: designing, implementing and maintening the internal control relevant for the preparation and fairly presentation of the statements of expenditures that are free from material misstatement, whether due to fraud or error.

## **Auditor's Responsibility**

3. Our responsibility is to express an opinion on these Statements of expenditures of each Research Project based on our audit. Our audit was performed in accordance with the Generally Accepted Government Auditing Standards of North America (GAGAS), the compliance supplement of the Office of Management and Budget – OMB –) of the United States of America – Circular A 133 and the International Auditing Standards (IAS). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the statements of expenditures are free from material misstatement.





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# **Independent auditor's report** (continued)

## **Internal Control Compliance Report**

4. The Administration Directorate General of Universidad Peruana Cayetano Heredia is responsible for establishing and keeping an effective internal control. When planning and performing our audit, we consider the internal control that may have a direct and material effect on the expenditures to determine the appropriate procedures in the performance of our review, based on which we will be able to provide an opinion regarding the compliance of the internal control in accordance with Circular OMB A-133.

In our opinion, based on our review of internal control we do not identify any significant deficiencies in accordance with Circular OMB A-133; for the period from 1 January 2020 to 31 December 2020.

### **Opinion**

5. In our opinion, the Statements of expenditures present fairly, in all material aspects, the financial position of the Research Projects, executed by Universidad Peruana Cayetano Heredia and funded directly by National Institute of Health (NIH) and indirectly by NIH through Universities in the United States of America, these are required by the federal entity of the United States of America - National Institute of Health (NIH) based in Circular OMB A-133, for the period from January 1, 2020 to December 31, 2020.

Countersigned by:

Panez, Chacaliaza y Asociados Sociedad Civil de R.L.

Marco G. Morales (Partner)

Peruvian Certified Public Accountant

Registration Nº 41412

September 15, 2021

Lima, Perú



Notes to the Statements of Expeditures of the Research Projects funded by federal funds of the United States of America, through direct contracts with National Institute of Health (NIH) and indirectly with NIH through Universities in the United States of America.

For the period from 1 January 2020 to 31 December 2020

#### II. INTRODUCTION

This report present the audit results of the following Research Projects, for the period from 1 January 2020 to 31 December 2020:

- Project 1: Improving diagnostic and management tolls for neurocysticercosis (Perú-JHU TMRC program).
- Project 2: Combined albendazole and praziquantel in subarachnoid NCC, CCC, Lead application Z.
- Project 3: 1/2-regional geohealth hub centered in Perú Perú.
- Project 4: Transversal study to detect cases of subaracnoidea neurocysticercosis at community level.
- Project 5: Training in infectious diseases in Perú time for capacity strengthening in clinical research (Training in parasitic diseases and central nervous system infections)
- Project 6: Transmission dynamics of residual malaria in the amazon: Defining a roadmap to malaria elimination.
- Project 7: Prevalence and incidence of neonatal HSV (herpes simplex) in pre-term infants.
- Project 8: HIV prevention and care for peruvian MSM and transgender women.
- Project 9: Perú infectious diseases epidemiology research training consortium
- Project 10: Syphilis immunology and biology to improve clinical management and vac.
- Project 11: Cooperasalud, technical support program in prevention and control of HIV to the Armed Forces of Perú.
- Project 12: The eating behaviour with sugar of the vector of malaria nyssorhynchus darlingi and the development of attractive toxic sugar bait (ATSB).
- Project 13: Translational research development for endemic infectious diseases of Amazonia.
- Project 14: University of California global health institute program for fellows and scholars.
- Project 15: Isolation and identification of cxcr4 and cxcr7 agonists from traditional phytopharmaceuticals as potential novel drugs for mental disorders.
- Project 16: Development and validation of a model based on agents to promote cysticercosis control
- Project 17: Patient-centered intervention to prevent tuberculosis among children < 5 years old.
- Project 18: Liver cystic echinococcosis: pre-clinical assessment of a novel, single step percutaneous treatment procedure (intracystic albendazole sulfoxide injection).
- Project 19: Paracas: program for advanced research capacities for aids in Perú.
- Project 20: An immune system for the city: a new paradigm for control of urban disease vectors.
- Project 21: The effect of strongyloides stercoralis on htlv-1 disease progression.
- Project 22: Close the gap between the identification and the treatment of cervical anomalities in Lima.
- Project 23: Implementation of the ring strategy for the control of integrated neurocisticercosis with the community.
- Project 24: Combined albendazole plus praziquantel in subarachnoid NCC, DCC application.
- Project 25: Markers of triclabendazole resistant fasciolasis the highlands of Perú.
- Project 26: International cohort study of children born to women infected with zika virus during pregnancy.

Project 27: Tuberculosis trials consortium (TBTC).

Project 28: Program for advanced research capacities for aids in Perú (Paracas) harnessing implementation scienc.

Project 29: Tod@s (transforming ourselves through dialogue, organizing, and service): an antiviolence program for transgender people in Perú.

Project 30: Spatiotemporal adaptation of anopheles darlingi in diverse ecological settings.

Project 31: Natural infection of norovirus and sapovirus in a birth cohort in a peruvian periurban community.

Project 32: Demonstration project to apply the principles and practices of the universal prevention curriculum (UPC) to schools in Perú 2 years.

Project 33: Immunology of asymptomatic malaria and the effects of immunity on plasmodium transmission.

Project 34: Ictus: Interdisciplanary cerebrovascular diseases training program in south America.

Project 35: Multidisciplinary training program on neuropsychiatry and behavioral disorders in first nations (neufin).

Project 36: Improving participation in vector controls campaigns through behavioral economics.

Project 37: International prospective observational cohort study of sika in infants and pregnancy (zip staudy).

Project 38: 2/2 - regional geohealth hub centered in Perú - US.

Project 39: Use of bisphosphonates to reduce the calcification process in animal models of cysticercosis.

Project 40: Research training in chronic, non-communicable respiratory diseases in Perú.

Project 41: A mobile phone short message service intervention to increase retention in HIV (weltel Perú).

Project 42: Infectious diseases training program in Bolivia: south - south training with Perú.

Project 43: Study of immune modulation in the neurocysticercosis of taenia solium through the use of a new post oncosfera in vitro model.

Project 44: Planning an MD-MSC combined degree program focused on translational research.

Project 45: Household air pollution and health: a multicountry lpg intervention trial.

Project 46: Novel nanoparticular diagnostics for cerebral toxoplasmosis and chagas in HIV patients living in Latinoamerica.

Project 47: A prospective study of acute flaccid myelitis (AFM) to define natural history, risk factors, and pat.

Project 48: Predictors of cardiomypathy progression in a chagas disease cohort in Bolivia.

Project 49: Population assessment of alzheimer's and related dementias in rural northern Perú.

Project 50: Chaka: Strengthening research support structures in the andean region.

Project 51: Orphan GPCR ligands from ethnobotanical sources as novel drugs for mental disorders.

Project 52: Ccasanet: caribbean, central and south america network.

Project 53: Co-flu Perú: Natural history of SARS-COV-2 in comparison with the influenza virus: a multicenter study focused in the south hemisphere and the equatorial regions.

Project 54: Canine rabies surveillance data collection: Improved tolos for the epidemiological surveillance.

Project 55: Characterization of infectious agent that causes leishmaniasis tegumentaria.

Project 56: Fend for TB.

Project 57: Placental colonization by treponema pallidum, congenital syphilis & novel vaccine.

Project 58: Core b data management.

Project 59: Kuskaya: an interdisciplinary training program for innovation in global health.

Project 60: Enabling infectious disease research capacity in the peruvian amazon.

Project 61: Fogarty global health fellows cordinating center (the UJMT global consortium: building research capacity through mentored training).

Project 62: Evaluation of the design and use of visualization tool of dengue vulnerability.

Project 63: Statistical methods for correlated outcome and covariate errors in studies of HIV/AIDS.

Project 64: HIV risk and psychosocial health among transgender women in Perú.

Project 65: Using burden of treatment as a clinical indicator of barriers to multimorbidity management in Perú: a mixed methods approach.

Project 66: Iquitos insectary and transmission biology.

Project 67: Evaluation of urgencies, emergencies and essential neurosurgical attention in Perú.

Project 68: Strengthening and consolidating resources for VIH prevention in the peruvian military.

Project 69: Isolation and identification of CXCR4 and CXCR7 agonists from traditional phytopharmaceuticals as potential novel drugs for mental disorders.

Project 70: Prevalescence of vertebral fracture and low bone mineral density in Peruvian women with HIV.

Project 71: Peruvian/brazilian amazon center of excellence in malaria (transmission dynamics of residual malaria in the amazon).

Project 72: Building sustainable and innovative research in cancer and cardiovascular disease: planning the design and development of the south american center of research excellence to counter NCDS (sacren).

Project 73: Addressing the global burden of leptospirosis in two endemic countries.

Project 74: Translational research development for endemic infectious diseases of amazonia.

Project 75: Experiences of drug consumption in patients that receive targa in a national hospital of Lima – Perú 2018.

Project 76: Peruvian/brazilian amazon center of excellence in malaria (spatiotemporal adaptation of anopheles darlingi in diverse ecological).

Project 77: Sexual education for teenagers.

Project 78: Effectivity of the intervention with text message in the collection of medicine and retention in care of Young adults living with HIV in a hospital of Lima.

Project 79: Impact of kids regarding environmental mercury and human exposure.

Project 80: Amazonian center of excellence in malaria research (immunology of asymtomatic malaria and the effects of immunity on plas).

Project 81: Amazonian center of excellence in malaria research (core b - data management).

Project 82: Universal biomarkers for plasmodium vivax exoerythrocytic infection.

Project 83: Inter-american training for innovations in emerging infectious diseases.

Project 84: Paracas Award: Consulting effectivity in nursey in the improvement of haart adherence in patients with hiv and alcohol consumption behavior.

Project 85: Socio-technical approach of systems to improve the diagnosis of tuberculosis through the use of mobile technologies in health.

Project 86: Addressing hypertension and diabetes through community-engaged systems in Puno, Perú (andes study).

Project 87: Barriers and facilitators for the Access of health in Peru in Venezuelan migrants.

Project 88: Molecular epidemiology of salmonella isolated resistant to bird production as contamination risk to the human in Lima, Perú.

#### III. GENERAL INFORMATION OF THE RESEARCH PROJECTS

### 3.1 Legal incorporation of Universidad Peruana Cayetano Heredia

The Universidad Peruana Cayetano Heredia was created by Supreme Decree N° 018 dated 22 September 1961. It is a non-state and non-profit private University. Its main purpose is to provide superior education, promote and spread scientific research in all fields and prepare students in the professional field, as well as promoting a university extension labor. It is governed by the new University Law 30220 and its complementary standards, bylaws, regulations and leadership.

# 3.2 Funding of Research Projects

The funding of these Research Projects comes from federal funds of the United States of America, specifically from the National Institute of Health - NIH, through contracts and subcontracts with Universidad Peruana Cayetano Heredia. These fundings are performed in two ways: directly between UPCH and NIH; and indirectly, through a subcontract where NIH finances a university in the Unites States of North America which at the same time subcontracts the research services of UPCH. The duration of our review is from 1 January 2020 to 31 December 2020.

# 3.3 Consolidated Statements of expenditures of the Research Projects

We present the consolidated statement of Expenditures of the Research Projects (\*) as follows.

(\*) According to the details provided in the Research Projects, these have different annual budget duration, therefore it is not possible to perform a comparison between budget versus implementation. Consequently, we present the expenditures executed in accordance to the previously indicated in the Terms of Reference in the period from 1 January 2020 to 31 December 2020.

## **CONSOLIDATED STATEMENT OF EXPENDITURES**

From the Resarch Projects funded by federal funds of the United States of America, under contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and the funding bodies.

									Indirect	
				Direct Costs					Costs	Total
	Employees			Equipment	Contract	Travel		Laboratory		
	Benefits	Training	Consulting	and/or Supplies	<b>Expenses</b>	Expenses	Others	services		
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Research Projects										
Project 1	214,175	-	8,049	33,030	50,885	1,545	19,749	4,800	27,247	359,480
Project 2	228,758	-	7,674	15,021	-	3,642	9,747	30,275	47,868	342,985
Project 3	85,793	299	14,041	13,597	164,271	4,735	29,356	-	11,876	323,968
Project 4	134,167	422	14,734	59,753	-	18,357	21,469	56,996	14,647	320,545
Project 5	45,071	87,157	665	16,987	22,991	3,825	11,116	5,909	25,127	218,848
Project 6	120,701	81	5,400	37,216	-	16,228	16,439	940	20,588	217,593
Project 7	180,130	-	-	4,213	-	323	8,483	334	23,676	217,159
Project 8	131,279	770	5,351	6,697	-	1,876	31,190	6,819	17,494	201,476
Project 9	64,243	49,550	825	8,979	38,100	4,826	12,677	726	10,070	189,996
Project 10	83,852	577	4,800	26,291	-	3,398	15,997	35,942	17,840	188,697
Project 11	142,897	-	19,854	8,588	642	314	9,792	5,332	114	187,533
Project 12	101,423	-	2,136	20,062	-	7,645	25,137	3,280	12,081	171,764
Project 13	34,962	30,152	2,299	45,980	879	15,976	7,805	6,206	17,665	161,924
Project 14	7,515	101,553	394	18,698	94	3,623	9,544	3,636	12,253	157,310
Project 15	76,165	-	18,971	22,759	-	1,350	13,519	1,677	10,523	144,964
Project 16	106,514	-	-	11,681	-	6,280	6,610	-	6,069	137,154
Project 17	116,359	-	4,342	2,979	-	3,932	3,441	-	1,323	132,376
Project 18	48,700	-	57,230	6,769	-	2,638	1,915	-	9,679	126,931
Project 19	3,123	50,868	1,200	212	40,680	20	3,444	-	20,679	120,226
Project 20	77,858	9,193	-	1,832	-	4,086	18,722	-	2,897	114,588

# **CONSOLIDATED STATEMENT OF EXPENDITURES**

From the Resarch Projects funded by federal funds of the United States of America, under contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and the funding bodies.

Indirect

									Indirect	
				Direct Costs					Costs	Total
_	Employees			Equipment	Contract	Travel		Laboratory		
	Benefits	Training	Consulting	and/or Supplies	Expenses	Expenses	Others	services		
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Research Projects										
Project 21	88,851	-	5,000	12,126	-	41	1,310	751	3,516	111,595
Project 22	69,656	-	-	32,183	-	2,350	171	-	6,863	111,223
Project 23	84,763	-	7,750	7,301	-	1,291	1,342	-	7,135	109,582
Project 24	87,583	465	-	6,229	-	236	2,651	-	7,499	104,663
Project 25	44,657	-	20,707	19,707	-	1,358	1,943	-	7,495	95,867
Project 26	60,162	-	-	881	29,945	91	357	-	4,198	95,634
Project 27	41,683	-	19,900	997	-	528	4,606	4,694	5,686	78,094
Project 28	24,203	30,489	7,750	-	-	-	6,206	-	5,017	73,665
Project 29	42,766	-	12,395	1,475	-	257	4,862	489	5,616	67,860
Project 30	37,819	-	-	7,672	-	6,562	7,375	-	6,626	66,054
Project 31	45,846	-	-	9,292	-	13	2,153	-	5,448	62,752
Project 32	32,912	2,700	20,000	· -	-	-	-	-	5,589	61,201
Project 33	27,720	, -	-	16,324	-	6,539	2,126	675	5,293	58,677
Project 34	28,068	5,508	3,708	13,459	-	173	25	-	2,286	53,227
Project 35	9,357	-	25,796	· -	14,507	3,500	17	-	-	53,177
Project 36	43,065	-	-	258	-	908	4,087	-	3,313	51,631
Project 37	9,049	-	-		31,256	-	6,022	-	4,808	51,135
Project 38	-	_	31,000	263	-	8,010	7,943	_	1,562	48,778
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# **CONSOLIDATED STATEMENT OF EXPENDITURES**

From the Resarch Projects funded by federal funds of the United States of America, under contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and the funding bodies.

	Direct Costs								Indirect costs	Total
	Employees Benefits	Training	Consulting	Equipment and/or Supplies	Contract Expenses	Travel Expenses	Others	Laboratory services		
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Research Projects										
Project 39	25,247	8,000	-	4,416	-	1,025	3,018	2,610	3,374	47,690
Project 40	28,816	-	9,437	1,469	-	-	-	-	1,623	41,345
Project 41	37,090	-	-	1,921	-	50	-	-	35	39,096
Project 42	12,199	-	16,914	-	-	6	6,562	-	1,254	36,935
Project 43	20,202	-	-	9,062	-	1,268	198	2,584	2,107	35,421
Project 44	31,781	-	-	551	-	-	168	· -	50	32,550
Project 45	24,643	-	-	-	-	-	-	1,487	2,430	28,560
Project 46	19,245	-	-	1,309	-	1,261	4,253	· <u>-</u>	2,367	28,435
Project 47	17,988	-	-	15	-	830	7,851	-	1,630	28,314
Project 48	21,567	-	-	4,497	-	341	886	-	963	28,254
Project 49	26,551	-	-	-	_	-	-	_	1,440	27,991
Project 50	27,239	160	-	8	-	28	74	-	-	27,509
Project 51	22,384	-	190	1,942	-	-	773	-	1,888	27,177
Project 52	17,288	6,506	-	-	-	-	189	-	2,985	26,968
Project 53	25,364	, -	-	-	_	-	7	_	20	25,391
Project 54	14,643	-	-	2,012	_	5,228	14	_	2,327	24,224
Project 55	20,183	-	-	· -	_	44	3	_	2,593	22,823
Project 56	18,429	-	-	-	-	-	1,002	-	896	20,327

# **CONSOLIDATED STATEMENT OF EXPENDITURES**

From the Resarch Projects funded by federal funds of the United States of America, under contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and the funding bodies.

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				Caataa Diraa	4				Costos	Total
-				Costos Direc		Traval		Laboratorii	Indirectos	Total
	Employees Benefits	Training	Consulting	Equipment and/or Supplies	Contract Expenses	Travel Expenses	Others	Laboratory services		
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Research Projects	USø	034	U3.p	ΟΟφ	03φ	USφ	υσφ	ΟΟφ	USĢ	ОЗФ
Project 57	11,321	-	-	103	-	66	430	4,280	2,241	18,441
Project 58	10,229	-	750	5,250	-	-	524	-	1,672	18,425
Project 59	13	-	5,724	-	-	65	449	194	11,062	17,507
Project 60	15,718	-	-	-	-	-	-	-	1,265	16,983
Project 61	6,535	-	2,745	1,082	-	-	1,837	-	3,465	15,664
Project 62	15,664	-	-	-	-	-	-	-	-	15,664
Project 63	11,521	-	-	1,545	-	-	-	-	475	13,541
Project 64	9,207	-	-	16	-	157	456	308	749	10,893
Project 65	9,206	-	-	10	-	-	-	-	164	9,380
Project 66	2,736	-	-	5,167	-	-	-	-	-	7,903
Project 67	-	225	3,500	-	-	2,163	764	-	1,145	7,797
Project 68	163	3,601	-	-	-	-	3,601	-	2	7,367
Project 69	-	-	-	4,741	-	-	-	-	18	4,759
Project 70	-	-	-	30	-	-	50	2,934	319	3,333
Project 71	41	-	-	-	-	-	966	-	1,763	2,770
Project 72	1,737	-	-	-	-	-	82	-	502	2,321
Project 73	-	-	-	-	-	-	-	-	2,011	2,011
Project 74	-	-	-	-	-	-	914	-	816	1,730

# **CONSOLIDATED STATEMENT OF EXPENDITURES**

From the Resarch Projects funded by federal funds of the United States of America, under contracts and subcontracts subscribed between Universidad Peruana Cayetano Heredia and the funding bodies.

	Costos Directos Indirectos									Total
	Employees Benefits	Training	Consulting	Equipment and/or Supplies	Contract Expenses	Travel Expenses	Others	Laboratory services		
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Research Projects										
Project 75	-	-	-	-	-	111	-	1,563	1	1,675
Project 76	(142)	-	-	-	-	-	-	-	1,313	1,171
Project 77	174	-	-	-	-	172	435	-	-	781
Project 78	777	-	-	-	-	-	-	-	-	777
Project 79	-	-	-	8	-	613	7	-	-	628
Project 80	-	-	-	-	-	-	218	-	329	547
Project 81	-	-	-	-	-	-	-	-	449	449
Project 82	-	-	-	-	-	-	-	-	89	89
Project 83	42	-	-	-	-	-	-	-	35	77
Project 84	60	-	-	-	-	-	11	-	-	71
Project 85	-	-	-	-	-	-	-	-	38	38
Project 86	-	-	-	-	-	-	-	-	35	35
Project 87	-	-	-	-	-	-	7	-	-	7
Project 88	-	-	-	-	-	-	-	-	6	6

## 3.4 Statement of individual expenditure of the Research Projects

The statements of expenditure corresponding to the management from 1 January 2020 to 31 December 2020 funded directly or indirectly by NIH, are the following:

Project 1

### UNIVERSIDAD PERUANA CAYETANO HEREDIA

### STATEMENT OF EXPENDITURE

Improving diagnostic and management tolls for neurocysticercosis (Perú-JHU TMRC Program)

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health – NIH. For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. García Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	214,175
Travel expenses	1,545
Consulting	8,049
Equipment and/or supplies	33,030
Laboratory and patient care services	4,800
Contract expenses	50,885
Other	19,749
Total direct costs	332,233
Total indirect costs - Overhead	27,247
Total Costs	359,480

Project execution period: From April 2017 to March 2022.

<u>Project General Objective</u>: The objective of this project is to develop 3 research projects and 3 operational units to provide a fully functional research network, as well as take advantage of the UPCH research network in Perú in this endemic disease.

## UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Combined albendazole and praziquantel in subarachnoid NCC, CCC, lead application</u>

Research Project funded by federal funds of the United States of America, under subcontract with National Institute Of Health - NIH. For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. García Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	228,758
Travel expenses	3,642
Consulting	7,674
Equipment and/or supplies	15,021
Laboratory and patient care services	30,275
Other	9,747
Total direct costs	295,117
Total indirect costs - Overhead	47,868
Total costs	342,985

Project execution period: From September 2015 to July 2020.

<u>Project General Objective</u>: The objective of this project is to show the progressive advances of the Albedazole (ABZ) treatment combined with the Praziquantel (PZQ) in patients with the Neurocisticercosis (NCC) disease.

## STATEMENT OF EXPENDITURE

## 1/2-regional geohealth hub centered in Perú - Perú

Research Project funded by federal funds of the United States of America, under direct contract with the National Institute Of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Gonzales Rengifo, Gustavo Francisco

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	85,793
Training	299
Travel expenses	4,735
Consulting expenses	14,041
Equipment and/or supplies	13,597
Contract expenses	164,271
Other	29,356
Total direct costs	312,092
Total indirect costs - Overhead	11,876
Total costs	323,968

Project execution period: From September 2015 to July 2020.

<u>Project General Objective</u>: The objective of this project is i) to conduct an intervention study of indoor air pollution and use of biomass, ii) to evaluate the relationship between outdoor air pollution and cardio respiratory disease in Lima, Perú and iii) to develop a predictive model of the impact of climate change on diarrheal diseases and vector-borne diseases (dengue, chagas and malaria)

### UNIVERSIDAD PERUANA CAYETANO HEREDIA

### STATEMENT OF EXPENDITURE

<u>Transversal study to detect cases of subaracnoidea neurocysticercosis at community level</u>

Research Project funded by federal funds of the United States of America, under subcontract with Oregon Health & Science University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. García Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	134,167
Training	422
Travel expenses	18,357
Consulting expenses	14,734
Equipment and/or supplies	59,753
Contract expenses	56,996
Other	21,469
Total direct costs	305,898
Total indirect costs - Overhead	14,647
Total costs	320,545

Project execution period: From July 2018 to June 2023.

<u>Project General Objective</u>: The objective of this research is to validate a new screening test for the antigen detection (AG) in urine for NCCSA in an endemic population, with confirmation through brain magnetic resonance, to understand the underlying prevalence of NCCSA and the performance of community level test.

## STATEMENT OF EXPENDITURE

<u>Training in infectious diseases in Perú - time for capacity strengthening in clinical research (training in parasitic diseases and central nervous system infections)</u>

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. García Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	45,071
Training	87,157
Travel expenses	3,825
Consulting expenses	665
Equipment and/or supplies	16,987
Contract expenses	5,909
Other	22,991
Total direct costs	11,116
Total indirect costs - Overhead	193,721
Total costs	25,127
Direct costs	218,848

Project execution period: From July 1999 to February 2021.

<u>Project General Objective</u>: The objective of this project is to develop and train the studients in short-term, medium-term and long-term programs, both abroad and in Perú, providing training in infectious diseases.

## UNIVERSIDAD PERUANA CAYETANO HEREDIA

### STATEMENT OF EXPENDITURE

<u>Transmission dynamics of residual malaria in the amazon: Defining a roadmap to malaria elimination</u>

Research Project funded by federal funds or the United States of America, under subcontract with Yale University.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Cáceres Palacios Carlos Fernando

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	120,701
Training	81
Travel expenses	16,228
Consulting expenses	5,400
Equipment and/or supplies	37,216
Contract expenses	940
Other	16,439
Total direct costs	197,005
Total indirect costs - Overhead	20,588
Total costs	217,593

Project execution period: From April 2020 to March 2024.

<u>Project General Objective</u>: The main objective is to identify the risk factors for the infection and the residual disease of malaria, both at individual and family level, it will supply samples of parasitic for molecular analysis detailed of the population and epidemiological data to develop new math models of malaria transmission.

## UNIVERSIDAD PERUANA CAYETANO HEREDIA

#### STATEMENT OF EXPENDITURE

# Prevalence and incidence of neonatal HSV (herpes simplex) in pre-term infants

Research Project funded by federal funds or the United States of America, under subcontract with University of Alabama.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Cárcamo Cavagnaro, Cesar Paul

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	180,130
Travel expenses	323
Equipment and/or supplies	4,213
Services of laboratory and patient care	334
Others	8,483
Total direct costs	193,483
Total indirect costs - Overhead	23,676
Total costs	217,159

Project execution period: From August 2016 to March 2021.

<u>Project General Objective</u>: The objective of this research is to estimate the incidence of neonatal herpes through the combination of two components. The first Will allow to determine the prevalence of infection by HSV confirmed by PCR in neonates with the diagnosis of suspicion of sepsis or meningitis (SSM). The second component will estimate the SSM incidence of in a prospective group of newborns.

#### UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

## HIV prevention and care for peruvian MSM and transgender women

Research Project funded by federal funds or the United States of America, under subcontract with The Regents of the University of California. For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Caceres Palacios, Carlos Fernando

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	131,279
Training	770
Travel expenses	1,876
Consulting expenses	5,351
Equipment and/or supplies	6,697
Services of laboratory and patient care	6,819
Others	31,190
Total direct costs	183,982
Total indirect costs - Overhead	17,494
Total costs	201,476

Project execution period: From February 2016 to December 2020.

<u>Project General Objective</u>: The objective of this research is to improve the attention quality in prevention and treatment of HIV address to the HSH and transwomen population in the intervention zone; in the context of proper attention to the population needs, taking as framework a health approach of right to health care in the context of continuous prevention and attention of HIV.

# STATEMENT OF EXPENDITURE

## Perú infectious diseases epidemiology research training consortium

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Lescano Guevara, Andrés Guillermo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	64,243
Training	49,550
Travel expenses	4,826
Consulting	825
Equipment and/or supplies	8,979
Laboratory and patient care services	726
Contract expenses	38,100
Other	12,677
Total direct costs	179,926
Total indirect costs - Overhead	10,070
Total Costs	189,996

Project execution period: From September 2005 to December 2024.

<u>Project General Objective</u>: The objective of this Project is to train the students to reach an answer capacity to emerging infectious diseases.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

### STATEMENT OF EXPENDITURE

### Syphilis immunology and biology to improve clinical management and vac

Research Project funded by federal funds or the United States of America, under direct contract with University of California, Los Ángeles.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Caceres Palacios, Carlos Fernando

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	83,852
Travel expenses	577
Consulting	3,398
Equipment and/or supplies	4,800
Laboratory and patient care services	26,291
Other	35,942
Total direct costs	15,997_
Total indirect costs - Overhead	170,857
Total Costs	17,840
Direct costs	188,697

Project execution period: From September 2018 to August 2022.

<u>Project General Objective</u>: The objective of this research is based on enrolling people with infection of syphilis and follow up with them to see how their lab values change and its clinic development after receiving treatment.

## UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Cooperasalud, technical support program in prevention and control of HIV to the Armed Forces of Perú

Research Project funded by federal funds or the United States of America, under contract with Navsup Fleet Logistics Support Center Sigonella. For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Caceres Palacios, Carlos Fernando

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	142,897
Travel expenses	314
Consulting	19,854
Equipment and/or supplies	8,588
Laboratory and patient care services	5,332
Other	642
Total direct costs	9,792
Total indirect costs – Overhead	187,419
Total Costs	114
Travel expenses	187,533

Project execution period: From November 2019 to November 2023.

<u>Project General Objective</u>: The objective of this research is to strenghten the resources and strategies of prevention and control of HIV in the Armed Forces of Perú.

#### STATEMENT OF EXPENDITURE

The eating behaviour with sugar of the vector of malaria nyssorhynchus darlingi and the development of attractive toxic sugar bait (ATSB) to increase the intervention success in Perú.

Research Project funded by federal funds of the United States of America, under subcontract with the Yale University.

For the period from 1 January 2020 to 31 December 2020

**Researcher: Caceres Palacios Carlos Fernando** 

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	101,423
Travel expenses	7,645
Consulting	2,136
Equipment and/or supplies	20,062
Laboratory and patient care services	3,280
Others	25,137
Total direct costs	159,683
Total indirect costs - Overhead	12,081_
Total costs	171,764

Project execution period: From April 2020 to March 2021.

<u>Project General Objective:</u> The objective of this Project is to provide innovative quantitative information on the time, place and frequency of feeding with sugar essential for the reproductive success of the male mosquito and for the female maximization of egg production and survival in the main vector of South American malaria, Nyssorhynchus darlingi. Our studies in the field and in a biosphere in the Peruvian Amazon will allow us to develop, for the first time in a tropical forest environment, an attractive toxic bait to increase local interventions against malaria that can lead to eradication in similar settings throughout the world.

## STATEMENT OF EXPENDITURE

# <u>Translational research development for endemic infectious diseases of Amazonia</u>

Research Project funded by federal funds of the United States of America, under subcontract with Yale University y.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	34,962
Training	30,152
Travel expenses	15,976
Consulting	2,299
Equipment and/or supplies	45,980
Laboratory and patient care services	6,206
Contract expenses	879
Other	7,805
Total direct costs	144,259
Total indirect costs - Overhead	17,665
Total costs	161,924

Project execution period: Desde noviembre 2018 hasta febrero 2021.

<u>Project General Objective</u>: The objective of this new training program in research in infectious diseases of the Project, with a focus on the training of candidates from Iquitos (National University of the Peruvian Amazon). This research training program explicitly focuses on increasing and maintaining research capacity in emerging endemic infectious diseases and mainly in Perú, particularly those found in the Peruvian Amazon. This training program will focus especially on infectious diseases associated with significant morbidity and mortality in the Peruvian Amazon.

## STATEMENT OF EXPENDITURE

# University of California global health institute program for fellows and scholars

Research Project funded by federal funds of the United States of America, under subcontract with University of California, San Francisco. For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. García Fúnegra, Patricia

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	7,515
Training	101,553
Travel expenses	3,623
Consulting	394
Equipment and/or supplies	18,698
Laboratory and patient care services	3,636
Contract expenses	94
Other	9,544
Total direct costs	145,057
Total indirect costs - Overhead	12,253
Total Costs	157,310

Project execution period: From April 2012 to June 2022.

<u>Project General Objective</u>: The objective of this project is to conduct a program through the consortium of four universities in California, USA, funded by the National Institutes of Health of the USA with the objective of providing mentored research internships during 12 months in Perú in favor of North American or Peruvian researchers.

#### UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Isolation and identification of cxcr4 and cxcr7 agonists from traditional phytopharmaceuticals as potential novel drugs for mental disorders.</u>

Research Project funded by federal funds of the United States of America, under contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Arroyo Hurtado, Gianfranco

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	76,165
Travel expenses	1,350
Consulting	18,971
Equipment and/or supplies	22,759
Laboratory and patient care services	1,677
Others	13,519
Total direct costs	134,441
Total indirect costs - Overhead	10,523
Total costs	144,964

Project execution period: From March 2019 to February 2024.

Project General Objective: The present study protocol proposes to optimize this animal model and characterize the immunopathological processes associated with cystic CNS infection (study 1). Subsequently, and in conjunction with a combined anthelmintic regimen using albendazole and praziquantel, the model will be used to determine the appropriate doses of ETN (study 2a) or MTX (study 2b) in the control of the local acute inflammatory response resulting from the therapy, anthelmintics in pigs with viable cerebral cysticercosis; measured outcomes will include inflammatory markers, blood-brain barrier dysfunction / permeability, neuronal damage, and structural changes in brain tissue. Finally, in Study 3, we will compare the optimal dose of ETN or MTX versus the standard anti-inflammatory regimen using the corticosteroid dexamethasone (DEX), in the control of percystic inflammation using the same endpoints as studies 2a and 2b. We hope that our findings provide the evidence base for further investigations with ETN or MTX in controlled studies in patients with NCC.

#### UNIVERSIDAD PERUANA CAYETANO HEREDIA

# STATEMENT OF EXPENDITURE

<u>Development and validation of a model based on agents to promote cysticercosis</u> <u>control</u>

Research Project funded by federal funds of the United States of America, under subcontract with Oregon Health & Science University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Garcia Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	106,514
Travel expenses	6,280
Equipment and/or supplies	11,681
Other	6,610
Total direct costs	131,085
Total indirect costs - Overhead	6,069
Total costs	137,154

Project execution period: From July 2019 to June 2024.

<u>Project General Objective</u>: The objective of this research is to develop an accurate transmission model that can efficiently identify those interventions with the highest probability of success for further testing in prospective field trials.

#### STATEMENT OF EXPENDITURE

### Patient-centered intervention to prevent tuberculosis among children < 5 years old

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Otero Vegas, Larissa

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	116,359
Travel expenses	3,932
Consulting	4,342
Equipment and/or supplies	2,979
Other	3,441
Total direct costs	131,053
Total indirect costs - Overhead	1,323
Total Costs	132,376

Project execution period: From September 2018 to April 2023.

<u>Project General Objective</u>: The objective of this research is to develop an intervention package to increase the information, motivation and memory to complete the isoniazid preventive therapy (TPI) in children < 5 years to those prescribed with TPI. As well as determine the feasibility and acceptability and measure the effectivity of the intervention package in increasing the adherence and completion of TPI.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

### STATEMENT OF EXPENDITURE

<u>Liver cystic echinococcosis: pre-clinical assessment of a novel, single step percutaneous treatment procedure (intracystic albendazole sulfoxide injection)</u>

Research Project funded by federal funds of the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Santivañez, Saúl

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	48,700
Travel expenses	2,638
Consulting expenses	57,230
Equipment and/or supplies	6,769
Other	1,915
Total direct costs	117,252
Total indirect costs - Overhead	9,679
Total costs	126,931

Project execution period: From March 2016 to February 2021

<u>Project General Objective</u>: The objective of this research is to evaluate a new approach of percutaneous treatment of a single step that consists in the intraquistica injection of Albendazol Sulfoxido (ABZ - SF), the active metabolite of ABZ.

#### STATEMENT OF EXPENDITURE

### Paracas: program for advanced research capacities for aids in Perú

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Gotuzzo Herencia, José Eduardo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	3,123
Training	50,868
Travel expenses	20
Consulting	1,200
Equipment and/or supplies	212
Contract expenses	40,680
Other	6,144
Total direct costs	102,247
Total indirect costs - Overhead	20,679
Total Costs	122,926

Project execution period: From August 2014 to May 2020.

<u>Project General Objective</u>: The objective of this project is to consolidate a mature framework of research training of HIV in Universidad Peruana Cayetano Heredia (UPCH), in which young or mid-career health top researchers reach scientific autonomy when providing solid evidence for the implementation of model of optimized or efficient attention that address in an understandable way the fact that HIV is rather a chronic and long-lasting infection.

## UNIVERSIDAD PERUANA CAYETANO HEREDIA

#### STATEMENT OF EXPENDITURE

### An immune system for the city: a new paradigm for control of urban disease vectors

Research Project funded by federal funds of the United States of America, under subcontract with the University of Pennsylvania.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Paz Soldan Parlette, Valerie

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	77,858
Training	9,193
Travel expenses	4,086
Equipment and/or supplies	1,832
Other	18,722
Total Direct costs	111,691
Total Indirect costs - Overhead	2,897
Total costs	114,588

Project execution period: From July 2020 to June 2024.

<u>Project General Objective</u>: The objective of this research is to develop a new paradigm for the control of dangerous insects following the model of the adaptive immune system. The Project will adapt aspects of the immune system from the cell to the landscape scale, and will test the new approach against a conventional one using a random cluster design in an ongoing vector control program of Chagas disease in the city of Arequipa.

## STATEMENT OF EXPENDITURE

## The effect of strongyloides stercoralis on HTLV-1 disease progression

Research Project funded by federal funds of the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Montes Delgado, Martin

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	88,851
Travel expenses	41
Consulting expenses	5,000
Equipment and/or supplies	12,126
Laboratory and patient care services	751
Other	1,310
Total direct costs	108,079
Total indirect costs - Overhead	3,516
Total costs	111,595

<u>Project execution period</u>: From March 2018 to February 2023.

Project General Objective: The objective of this research is to prove two hypothesis: 1) The infection for SS leads to an increase of proviral charge of HTLV-1, infected cells and malignant transformation of T CD4+ cells. We will compare the proviral charge and infected T CD4+ number of cells in peripheral blood useing uding dyeing for CADM1 and the loss of CD7 expression (early mark of malignant cell transformation). In the co-infection for HTLV-1/SS before and up to 6 months after the treatment for SS; co-infection cases with more than 5 years of follow up or controls; co-infected patients of HTLV-1/SS subsequently followed. 2) Early cell transformation (CADM1 positive, CD7 low) is driven by diverse mechanisms: a) lymphoproliferation driven by virus (proviral charge, lymphoproliferation driven by antigens and spontanous); bacterial transallocation and swelling associated and/or expansión of T regulating cells. These studies will test the importance of infection for SS as co factoring in lymphoproliferation disorders, as well as exploring new possible therapeutical strategies against SS in patients with HTLV-1 and general population.

### STATEMENT OF EXPENDITURE

Close the gap between the identification and the treatment of the cervical abnormalities in Lima

Research Project funded by federal funds of the United States of America, under subcontract with Duke University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Garcia Fúnegra, Patricia

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	69,656
Travel expenses	2,350
Equipment and/or supplies	32,183
Other	171
Total Direct costs	104,360
Total Indirect costs - Overhead	6,863
Total costs	111,223

Project execution period: From April 2020 to April 2022.

<u>Project General Objective</u>: The objective of this research is to plead for the legislation and changes in public policies to guarantee the respect of human rights of trans people in Perú.

### STATEMENT OF EXPENDITURE

<u>Implementation of the ring strategy for the control of Neurocysticercosis integrated with the community.</u>

Research Project funded by federal funds of the United States of America, under subcontract with Oregon Health & Science University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Garcia Fúnegra, Patricia Garcia.

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	84,763
Travel expenses	1,291
Consulting	7,750
Equipment and/or supplies	7,301
Other	1,342
Total direct costs	102,447
Total indirect costs - Overhead	7,135
Total costs	109,582

Project execution period: From August 2019 to July 2024.

<u>Project General Objective</u>: The main objective is to develop an adoptable approach for the TA as a program of T. solium control.

## STATEMENT OF EXPENDITURE

## Combined albendazole plus praziquantel in subarachnoid NCC, DCC application

Research Project funded by federal funds of the United States of America, under subcontract with National Institute Of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Lescano Guevara, Andrés Guillermo

	Project Execution
	US\$
	234
Direct costs	
Employees' benefits	87,583
Training expenses	465
Travel expenses	236
Equipment and/or supplies	6,229
Other	2,651
Total direct costs	97,164
Total indirect costs - Overhead	7,499
Total costs	104,663

Project execution period: From November 2015 to July 2021.

Project General Objective: The main objective is to establish a Data Coordination Center (DCC) for the NIH / NINDS clinical trial application entitled "A Randomized Trial of Combined Albendazole Plus Praziquantel for Subarachnoid Cysticercosis of the Sylvian Fissure or the Basal Cisterns". In the aforementioned five-year study, a total of 164 subjects, the subjects will be enrolled in a randomized, double-blind clinical trial with 12 months of follow-up each.

# STATEMENT OF EXPENDITURE

# Markers of triclabendazole resistant fasciolasis the highlands of Perú

Research Project funded by federal funds of the United States of America, under subcontract with NIH - UTMB.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Gotuzzo Herencia, Jose Eduardo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	44,657
Travel expenses	1,358
Consulting	20,707
Equipment and/or supplies	19,707
Other	1,943
Total Direct costs	88,372
Total Indirect costs - Overhead	7,495
Total costs	95,867

Project execution period: From August 2020 to July 2023.

Project General Objective: The objective of this research is:

Objective 1. Detect candidate genetic markers associated with Triclabendazole Resistance (TCBZ-R) in Perú.

Objective 2. To validate the genetic markers associated with TCBZ-R using independent cohorts and to determine if the genetic basis of resistance is conserved among the populations of parasites that infect animals and humans.

Objective 3. Define the transcriptional alterations associated with TCBZ-R in Perú.

# STATEMENT OF EXPENDITURE

<u>International cohort study of children born to women infected with zika virus during pregnancy</u>

Research Project funded by federal funds of the United States of America, under subcontract with WESTAT.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Ochoa Woodell, Theresa

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	60,162
Travel expenses	91
Equipment and/or supplies	881
Contract expenses	29,945
Other	357
Total Direct costs	91,436
Total Indirect costs - Overhead	4,198
Total costs	95,634

Project execution period: From March 2020 to September 2020.

<u>Project General Objective</u>: The objective of this Project is to determine the long-term neurodevelopmental outcomes among children born to women with documented ZIKV infection during pregnancy.

#### STATEMENT OF EXPENDITURE

## <u>Tuberculosis trials consortium (TBTC)</u>

Research Project funded by federal funds of the United States of America, under subcontract with Vanderbilt University Medical Center.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Gotuzzo Eduardo
Dr. Seas Carlos

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	41,683
Training expenses	528
Consulting expenses	19,900
Equipment and/or supplies	997
Laboratory and patient care services	4,694
Other	4,606
Total direct costs	72,408
Total indirect costs - Overhead	5,686
Total costs	78,094

Project execution period: From October 2010 to September 2018.

<u>Project General Objective</u>: The goal of this research is the randomized, open-label, phase 3 controlled clinical trial, which studies teraphy shortening regymes that contains Rifapentina for the treatment of sensitive pulmonar tuberculosis. The efficiency of the regyme is evaluated by performing a clinical, lab and microbacteriological follow up to each participant for 18 months.

#### STATEMENT OF EXPENDITURE

<u>Program for advanced research capacities for aids in Perú (Paracas) harnessing implementation scienc</u>

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. González Lagos, Elsa

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	24,203
Training	30,489
Consulting	7,750
Other	3,506
Total direct costs	65,948
Total indirect costs - Overhead	5,017
Total Costs	70,965

Project execution period: From June 2020 to December 2024.

<u>Project General Objective</u>: The objective of this research is to generate young Peruvian Health Researchers with the necessary tools to carry out successful autonomous research in the different fields of HIV required to ensure the appropriate care of people living with HIV and eventually achieve the goal of eliminating transmission. HIV.

## STATEMENT OF EXPENDITURE

<u>Tod@s (transforming ourselves through dialogue, organizing, and service): an anti-violence program for transgender people in Perú</u>

Research Project funded by federal funds of the United States of America, under subcontract with Fenway Community Health Center.
For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Silva Santisteban, Portella Alfonso

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	42,766
Travel expenses	257
Consulting expenses	12,395
Equipment and/or supplies	1,475
Laboratory and patient care services	489
Other	4,862
Total direct costs	62,244
Total indirect costs - Overhead	5,616
Total costs	67,860

Project execution period: From June 2015 to June 2020.

<u>Project General Objective</u>: The objective of this project is to improve the safety and well-being of transgender people affected by violence, harassment and violations of human rights and in Perú through the creation of a working group.

#### STATEMENT OF EXPENDITURE

## Spatiotemporal adaptation of anopheles darlingi in diverse ecological settings

Research Project funded by federal funds of the United States of America, under direct subcontract with Yale University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Herrera Varela, Manuela

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	37,819
Travel expenses	6,562
Equipment and/or supplies	7,672
Other	7,375
Total Direct costs	59,428
Total Indirect costs - Overhead	6,626
Total costs	66,054

Project execution period: From April 2020 to March 2024.

<u>Project General Objective</u>: This project will address three little-studied facets that will provide key details of how this vector maintains its dominant role in the transmission dynamics of Amazonian malaria to: 1) delineate the importance of anthropogenic breeding sites leading to high productivity and dispersal of mosquitoes near human habitation; 2) examine the rapid adaptation in modified landscapes of the location (indoor / outdoor) and night time of biting behavior; and 3) show how the preferences / changes of this species of mosquito interact with asymptomatic people of Plasmodium vivax to maintain hypoendemic transmission.

#### STATEMENT OF EXPENDITURE

Natural infection of norovirus and sapovirus in a birth cohort in a Peruvian periurban community

Research Project funded by federal funds of the United States of America, under subcontract with Johns Hopkins University.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Mirko Zimic Peralta

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	45,846
Travel expenses	13
Equipment and/or supplies	9,292
Other	2,153
Total direct costs	57,304
Total indirect costs - Overhead	5,448
Total costs	62,752

Project execution period: From June 2015 to May 2020.

<u>Project General Objective</u>: The objective of this project is to characterize the epidemiology of Norovirus (NV) and Sapovirus (SV) in Peruvian children. As well as, evaluate the people who acquired protective immunity to NV in a setting of frequent exposure.

## STATEMENT OF EXPENDITURE

<u>Demonstration project to apply the principles and practices of the universal prevention curriculum (UPC) to schools in Perú 2 years</u>

Research Project funded by federal funds of the United States of America, under "cooperative agreement" with American Embassy Lima.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Salazar Silva, Fernando

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	32,912
Training expenses	20,000
Consulting expenses	2,700
Total direct costs	55,612
Total indirect costs - Overhead	5,589
Total costs	61,201

Project execution period: From April 2018 to March 2020.

<u>Project General Objective</u>: The objective of this research is to provide the skills and knowledge to directors, teachers and other school staff that are necessary to select and implement strategies of prevention of substance abuse based on evidence.

#### STATEMENT OF EXPENDITURE

Immunology of asymptomatic malaria and the effects of immunity on plasmodium transmission

Research Project funded by federal funds of the United States of America, under direct subcontract with Yale University
For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Torres Fajardo, Katherine

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	27,720
Travel expenses	6,539
Equipment and/or supplies	16,324
Laboratory and patient care services	675
Other	2,126
Total Direct costs	53,384
Total Indirect costs - Overhead	5,293
Total costs	58,677

Project execution period: From April 2019 to March 2024.

<u>Project General Objective</u>: The main objective is to compare the inflammatory response and responsiveness of the innate immune cells of clinically ill and asymptomatic malaria patients. Defined biomarkers are validated and we question whether asymptomatic patients are prone to developing diseases in recurrent infections. The results of these experiments are to identify innate immune biomarkers, as well as B and T cell responses that predict disease outcome and mosquito transmission.

## STATEMENT OF EXPENDITURE

Ictus: Interdisciplanary cerebrovascular diseases training program in south America

Research Project funded by federal funds of the United States of America, under direct subcontract with University Of Washington.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. García Lescano Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	28,068
Training expenses	3,708
Travel expenses	173
Consulting expenses	5,508
Equipment and/or supplies	13,459
Other	25
Total Direct costs	50,941
Total Indirect costs - Overhead	2,286
Total costs	53,227

Project execution period: From June 2016 to May 2024.

<u>Project General Objective</u>: The objective of this research is to reduce the mortality in cerebrovascular diseases in Perú.

#### STATEMENT OF EXPENDITURE

<u>Multidisciplinary training program on neuropsychiatry and behavioral disorders in first nations (NEUFIN)</u>

Research Project funded by federal funds of the United States of America, under subcontract with National Institute Of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gallo López-Aliaga Carla María

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	9,357
Training expenses	25,796
Travel expenses	3,500
Contract expenses	14,507
Other	17
Total Direct costs	53,177
Total Indirect costs - Overhead	-
Total costs	53,177

Project execution period: From March 2015 to February 2020.

<u>Project General Objective</u>: The objective of this project is to develop the capacity for sustainable research in Bolivia, Paraguay, Perú and Argentina. A five-year joint training program will be developed with researchers from those 4 countries and the United States in the areas of epidemiology, genetics and neuroimaging for the study of Major psychiatric disorders in native populations of South America.

## STATEMENT OF EXPENDITURE

## Improving participation in vector controls campaigns through behavioral economics

Research Project funded by federal funds of the United States of America, under subcontract with University of Pennsylvania.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Naquira Velarde, César Gabriel

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	43,065
Travel expenses	908
Equipment and/or supplies	258
Other	4,087
Total direct costs	48,318
Total indirect costs - Overhead	3,313
Total costs	51,631

Project execution period: From June 2014 to May 2021.

<u>Project General Objective</u>: The objective of this project is to carry out randomized field work with three interventions to increase participation in vector control campaigns carried out by the Ministry of Health (MINSA) in Arequipa, Perú.

#### STATEMENT OF EXPENDITURE

International prospective observational cohort study of sika in infants and pregnancy (ZIP study)

Research Project funded by federal funds of the United States of America, under subcontract with the University of Alabama.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Ochoa Woodell, Theresa Jean

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	9,049
Contract expenses	31,256
Other	6,022
Total direct costs	46,327
Total indirect costs - Overhead	4,808
Total costs	51,135

Project execution period: From June 2017 to November 2020.

<u>Project General Objective</u>: The objective of this project is to compare the incidence of congenital malformations and adverse fetal consequences (such as microcephaly, death of the fetus, neonatal death, malformations of the Central Nervous System (CNS), dropsy and ocular abnormalities) in fetuses and infants of: i) women who have been infected with the Sika Virus, ii) women who have developed symptoms of an infection with Zika; and iii) women who have not developed symptoms.

## STATEMENT OF EXPENDITURE

## 2/2 - regional geohealth hub centered in Perú - US

Research Project funded by federal funds of the United States of America, under subcontract with University Of Emory.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Gonzales Rengifo, Gustavo Francisco

	Project Execution (*)
	US\$
Direct costs	
Training expenses	31,000
Travel expenses	8,010
Equipment and/or supplies	263
Other	7,943
Total Direct costs	47,216
Total indirect costs - Overhead	1,562
Total costs	48,778

Project execution period: From September 2015 to July 2020.

<u>Project General Objective</u>: The objective of this project is to develop and validate new tools and approaches to reduce the impact of leptospirosis on human health.

#### STATEMENT OF EXPENDITURE

<u>Use of bisphosphonates to reduce the calcification process in animal models of cysticercosis</u>

Research Project funded by federal funds of the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Bustos Palomino, Javier Arturo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	25,247
Travel expenses	1,025
Consulting expenses	8,000
Equipment and/or supplies	4,416
Laboratory and patient care services	2,610
Other	3,018
Total direct costs	44,316
Total indirect costs - Overhead	3,374
Total costs	47,690

Project execution period: From March 2015 to February 2020.

<u>Project General Objective</u>: The objective of this research is to evaluate whether Bisphosphonates decrease the likelihood and degree of residual calcification from the degeneration of the muscular and cerebral cyst of brain degeneration and cysts in animal models.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Research training in chronic, non-communicable respiratory diseases in Perú

Research Project funded by federal funds of the United States of America, under subcontract with Johns Hopkins University- JHU.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Stella Hartinger

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	28,816
Training expenses	9,437
Equipment and/or supplies	1,469
Total Direct costs	39,722
Total Indirect costs - Overhead	1,623
Total costs	41,345

Project execution period: From April 2020 to May 2020.

<u>Project General Objective:</u> The goal is to develop research and training capacity to address environmental risk factors (ambient air pollution, household air pollution, smoking, occupational exposures) that drive the epidemic of chronic respiratory diseases (asthma, COPD, PID). in Perú.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

A mobile phone short message service intervention to increase retention in HIV (Weltel Perú)

Research Project funded by federal funds of the United States of America, under direct contract with National Institutes of Health - NIH.

For the period from 1 January 2020 to 31 December 2020.

## Researcher: Dr. Menacho Alvirio, Luis Alberto

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	37,090
Travel expenses	50
Equipment and/or supplies	1,921
Other	-
Total Direct costs	39,061
Total Indirect costs - Overhead	35
Total costs	39,096

Project execution period: From August 2020 to July 2025.

<u>Project General Objective</u>: The objectives of this research are: 1) to develop an SMS-based intervention to be delivered with WelTel to increase retention in HIV care among HIV + MSM in Perú; and 2) determine the efficacy of the intervention to increase retention in HIV care compared to standard of care.

## STATEMENT OF EXPENDITURE

# Infectious diseases training program in Bolivia: south - south training with Perú

Research Project funded by federal funds of the United States of America, under subcontract with Johns Hopkins University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. García Lescano, Héctor Hugo

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	12,199
Training expenses	16,914
Travel expenses	6
Other	6,562
Total direct costs	35,681
Total indirect costs - Overhead	1,254
Total costs	36,935

Project execution period: Desde From May 2015 to December 2024.

<u>Project General Objective</u>: The objective of this research is to develop and build a long-term sustainable training program in long-term in tropical infectious diseases in Bolivia.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Study of immune modulation in the neurocysticercosis of taenia solium through the use of a new post oncosfera in vitro model

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health National Institutes of Health - NIH. For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Verastegui Pimentel, Manuela

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	20,202
Travel expenses	1,268
Equipment and/or supplies	9,062
Laboratory and patient care services	2,584
Other	198
Total direct costs	33,314
Total indirect costs - Overhead	2,107
Total Costs	35,421

Project execution period: From May 2020 to April 2025.

<u>Project General Objective:</u> The objective of this research is to propose a new in vitro model for the development of embryos of Taenia solium, developed by the group, which makes it possible to determine the specific differences of each stage in the expression of the antigen to identify the immunomodulatory molecules used by the parasite to survive. evading the host immune response, with a focus on recently described TGF- $\beta$  mimic molecules that have been shown to play a significant role in parasite immunomodulation.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Planning an MD - MSC combined degree program focused on translational research

Research Project funded by federal funds of the United States of America, under "grant" with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Montes Delgado, Martin

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	31,781
Equipment and/or supplies	551
Other	168
Total Direct costs	32,500
Total Indirect costs - Overhead	50
Total costs	32,550

Project execution period: From July 2020 to March 2022.

<u>Project General Objective</u>: The objectives of this program are: 1) Curriculum design for the Master of Research in Biomedical Sciences; 2) address at both academic institutions the feasibility of accommodating dual accreditation requirements for a combined program; 3) Develop the induction program for the program's teachers, stimulating good mentoring practices for very young students; 4) pilot for the implementation of master's courses; and 5) analyze strategies to optimize the retention and transition of students to the next level of scientific training.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Household air pollution and health: a multicountry LPG intervention trial

Research Project funded by federal funds of the United States of America, under subcontract with Johns Hopkins University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Hartinger Peña, Stella María

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	24,643
Laboratory and patient care services	1,487
Total Direct costs	26,130
Total indirect costs - Overhead	2,430
Total costs	28,560

Project execution period: From September 2016 to June 2021.

<u>Project General Objective</u>: The objective of this research is to show that the houses with biomass stoves will show better health results in comparison with the control homes.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Novel nanoparticular diagnostics for cerebral toxoplasmosis and chagas in HIV patients living in Latinoamérica

Research Project funded by federal funds of the United States of America, under subcontract with The John Hopkins University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Zimic Peralta, Mirko

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	19,245
Travel expenses	1,261
Equipment and/or supplies	1,309
Other	4,253
Total direct costs	26,068
Total indirect costs - Overhead	2,367
Total costs	28,435

Project execution period: From June 2018 to May 2023.

<u>Project General Objective</u>: The objective of this project is to help define the clinical spectrum of the neurological disease associated with HIV in Latin America.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

A prospective study of acute flaccid myelitis (AFM) to define natural history, risk factors, and pat

Research Project funded by federal funds of the United States of America, under subcontract with Universidad de Alabama.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Ochoa Woodell, Theresa

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	17,988
Travel expenses	830
Equipment and/or supplies	15
Other	7,851
Total direct costs	26,684
Total indirect costs - Overhead	1,630
Total Costs	28,314

Project execution period: From July 2019 to June 2021.

<u>Project General Objective</u>: The objective of this Project is to describe the clinical spectrum of acute flaccid myelitis (AFM) in pediatric patients and its possible association with infectious processes.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Predictors of cardiomypathy progression in a chagas disease cohort in Bolivia

Research Project funded by federal funds of the United States of America, under subcontract with Johns Hopkins University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Verastegui Pimentel, Manuela

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	21,567
Travel expenses	341
Equipment and/or supplies	4,497
Other	886
Total direct costs	27,291
Total indirect costs - Overhead	963
Total Costs	28,254

Project execution period: From February 2014 to June 2024.

<u>Project General Objective</u>: The objective of this research is the early detection of Chagas disease to the heart can reflect early changes in cardiac structure and function, substances such as type B natriuretic peptide released in response to heart disease or a substance such as transforming growth factor, implicated in cardiac pathogenesis at the cellular level

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Population assessment of alzheimer's and related dementias in rural northern Perú</u> <u>northern Perú</u>

Research Project funded by federal funds of the United States of America, under subcontract University of Washington.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Garcia Lescano, Héctor Hugo

	Project Execution
	(*)
	US\$
Direct costs	
Training expenses	26,551
Total Direct costs	26,551
Total Indirect costs - Overhead	1,440
Total Costs	27,991

Project execution period: From August 2019 to May 2022.

<u>Project General Objective</u>: The objective of this research is based on population studies of cognitive impairment and dementia in rural communities by establishing a baseline of cognitive status.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Chaka: strengthening research support structures in the andean region

Research Project funded by federal funds of the United States of America, under direct contract with National Institute Of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Cabrera Matta, Allin

	Project Execution
	US\$
Direct costs	
Employees' benefits	27,239
Travel expenses	28
Consulting expenses	160
Equipment and/or supplies	8
Other	74
Total Direct costs	27,509
Total Indirect costs - Overhead	-
Total costs	27,509

Project execution period: From May 2016 to April 2021.

<u>Project General Objective</u>: The objective of this research is to develop a generation of administrators qualified in the management of research projects at the Universidad Peruana CAYETANO HEREDIA, and to catalyze a career in research administration, which will help develop an enabling environment and systems for health research.

## STATEMENT OF EXPENDITURE

# Orphan GPCR ligands from Ethnobotanical Sources as Novel Drugs for Mental Disorders

Research Project funded by federal funds of the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Vaisberg Wolach, Abraham Jaime

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	22,384
Training expenses	190
Equipment and/or supplies	1,942
Other	773
Total Direct costs	25,289
Total indirect costs - Overhead	1,888
Total costs	27,177

Project execution period: From July 2018 to may 2020.

<u>Project General Objective</u>: The objective of this research is to identify the molecular pathways of neuronal function that are promising new intervention targets, by isolating at least two novel neuroactive compounds from plants used in Traditional Peruvian Medicine for the treatment of mental disorders.

## STATEMENT OF EXPENDITURE

Ccasanet: caribbean, central and south america network

Research Project funded by federal funds of the United States of America, under subcontract with Vanderbilt University Medical Center.

For the period from 1 January 2020 to 31 December 2020.

Researcher: Dr. Gotuzzo Herencia, José Eduardo

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	17,288
Consulting expenses	6,506
Other	189
Total Direct costs	23,983
Total Indirect costs - Overhead	2,985
Total costs	26,968

Project execution period: From July 2016 to June 2021.

<u>Project General Objective</u>: The objective of this project is to investigate the changing epidemiology of human immunodeficiency virus (HIV) / acquired immunodeficiency syndrome (AIDS) in the context of wider use and availability of antiretroviral therapy, differences in HIV care and treatment programs, an aging HIV population and an increasing number of children exposed but not infected with HIV.

## STATEMENT OF EXPENDITURE

Co-flu Perú: Natural history of SARS-COV-2 in comparison with the influenza virus: a multicenter study focused in the south hemisphere and the equatorial regions

Research Project funded by federal funds of the United States of America, under subcontract with ST Jude Childrens Research Hospital.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. García Fúnegra, Patricia Jannet

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	25,364
Other	7
Total Direct costs	25,371
Total Indirect costs - Overhead	20
Total costs	25,391

Project execution period: From Jun 2020 to May 2022.

Project General Objective: The objectives of this research are:

- 1. Document the clinical evolution and serious illness risk factors in people infected by SARS-CoV-2.
- 2. Define the virological characteristics of the SARS-CoV-2 infection.
- 3. Define the magnitud, quality and longevity of the immune responses to SARS-CoV-2.
- (\*) It includes the duration of our review, from 1 January 2020 to 31 December 2020.

## STATEMENT OF EXPENDITURE

<u>Canine rabies surveillance data collection: Improved tolos for the epidemiological surveillance</u>

Research Project funded by federal funds of the United States of America, under contract with Center for disease control and prevention.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Castillo Neyra, Ricardo

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	14,643
Travel expenses	5,228
Equipment and/or supplies	2,012
Other	14
Total Direct costs	21,897
Total Indirect costs - Overhead	2,327
Total costs	24,224

Project execution period: From September 2019 to September 2023.

<u>Project General Objective</u>: The objective of this research is to use the new CDC data collection and systematization tools. This will allow the collection of critical data to assess and inform better epidemiological models of canine rabies transmission. In addition, the data collected will be used to refine the tools developed by the CDC and increase their usefulness in areas affected by rabies.

# STATEMENT OF EXPENDITURE

# Characterization of infectious agent that causes leishmaniasis tegumentaria

Research Project funded by federal funds of the United States of America, under contract with American Embassy - Namru 6.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Llanos Cuentas, Elmer Alejandro

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	20,183
Travel expenses	44
Other	3
Total direct costs	20,230
Total indirect costs - Overhead	2,593
Total costs	22,823

Project execution period: From November 2019 to May 2020.

<u>Project General Objective</u>: The objective of this research aims to characterize the different species of leishmaniasis tegumentaria of the patients that go to the Unit of Leishmaniasis and Malaria (ULM) of the Institute of Tropical Medicine Alexander Von Humboldt.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

## Fend for TB

Research Project funded by federal funds of the United States of America, under subcontract with Rutgers The State University of New Jersey.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Ugarte Gil, Cesar

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	18,429
Other	1,002
Total direct costs	19,431
Total indirect costs - Overhead	896
Total costs	20,327

Project execution period: From June 2020 to May 2025.

<u>Project General Objective</u>: The objective of this research is to provide biological samples as well as quality clinical information for TB investigations of the FEND group for TB in order to evaluate the diagnostic accuracy and operational characteristics of new in vitro diagnostic tests in the context of endemic countries.

# STATEMENT OF EXPENDITURE

# Placental colonization by treponema pallidum, congenital syphilis & novel vaccine

Research Project funded by federal funds of the United States of America, under subcontract with Rutgers University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Cárcamo Cavagnaro, César Raul

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	11,321
Travel expenses	66
Equipment and/or supplies	103
Laboratory and patient care services	4,280
Other	430
Total direct costs	16,200
Total indirect costs - Overhead	2,241
Total costs	18,441

Project execution period: From August 2015 to January 2020.

<u>Project General Objective</u>: The objective of this project is to determine the impact of the adaptive immune response by antibodies against syphilis both in colonization of the placenta as well as in the clinical presentations of congenital syphilis in pregnant women.

# STATEMENT OF EXPENDITURE

# Core B - data management

Research Project funded by federal funds of the United States of America, under subcontract with Yale University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Gamboa Vilela, Dionicia

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	10,229
Training expenses	750
Equipment and/or supplies	5,250
Other	524
Total Direct costs	16,753
Total Indirect costs - Overhead	1,672
Total costs	18,425

Project execution period: From April 2019 to March 2024.

<u>Project General Objective</u>: The objective of this Project is to support the design of study, preparation/validation of reporting forms of cases, data clearing and analysis.

## STATEMENT OF EXPENDITURE

Kuskaya: an interdisciplinary training program for innovation in global health

Research Project funded by federal funds or the United States of America, under direct contract with National Institute of Health - NIH For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Blas Blas, Magaly

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	13
Travel expenses	65
Consulting	5,724
Laboratory and patient care services	194
Other	449
Total direct costs	6,445
Total indirect costs - Overhead	11,062
Total Costs	17,507

Project execution period: From September 2013 to August 2020.

<u>Project General Objective</u>: The objective of this research is to develop a new generation of innovative leaders in Global Health (grantee Kuskaya), capable of working in a collaborative way with colleagues of the north and the south in interdisciplinary equipment, defining problems to help finding solutions through the research.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# **Enabling infectious disease research capacity in the Peruvian amazon**

Research Project funded by federal funds of the United States of America, under subcontract with Tulane University - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Lescano Guevara, Andrés Guillermo

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	15,718
Total Direct costs	15,718
Total Indirect costs - Overhead	1,265
Total costs	16,983

<u>Project execution period</u>: From November 2018 to February 2023.

<u>Project General Objective</u>: The objective of this research is to propose a collaborative research training program that strengthens the capacity of an institution in a country with medium or low resources to carry out research on infectious diseases that focuses on 1) endemic or life-threatening diseases emerging from diseases infectious 2) neglected tropical diseases 3) frequent infections such as co-infections in HIV-infected individuals or 4) infections associated with noncommunicable diseases that are of public health importance in low- and middle-resource countries.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Fogarty global health fellows coordinating center (The UJMT global consortium: Building research capacity through mentored training)

Research Project funded by federal funds of the United States of America, under subcontract with University Of North Carolina at Chapel Hill.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Zimic Peralta, Mirko

	Project Execution
	(*)_
	US\$
Direct costs	
Employees' benefits	6,535
Consulting	2,745
Equipment and/or supplies	1,082
Other	1,837
Total direct costs	12,199
Total indirect costs - Overhead	3,465
Total costs	15,664

Project execution period: From July 2017 to June 2022.

<u>Project General Objective</u>: The consortium of members from University North Carolina at Chapel Hill, Johns Hopkins University, Morehouse School of Medicine, and Tulane University have supported training with mentors in 28 low- and middle-income family affiliated countries in commitment to problem solving. global health. more than half of our postdoctoral fellows have taken academic positions after completing the program; many have successfully competed for research funding, including from NIH, to become independently funded Researcheres.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Evaluation of the design and usability of a visualization tool of dengue vulnerability

Research Project funded by federal funds of the United States of America, under subcontract with the University of Washington For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Garcia Fúnegra, Patricia Jannet

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	15,664
Total Direct costs	15,664
Total Indirect costs - Overhead	-
Total costs	15,664

Project execution period: From October 2019 to March 2020.

<u>Project General Objective</u>: The objective of this research is to contextualize the presence of vectors in relation to the known existing community and health infrastructure to determine vulnerability to diseases to find areas where populations are most vulnerable to outbreaks or serious health consequences due not only to the exposure to pathogens, but also to aspects of climate, public health and sanitary capacity, infrastructure and community resilience.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Statistical methods for correlated outcome and covariate errors in studies of HIV/AIDs</u>

Research Project funded by federal funds of the United States of America, under subcontract with Vanderbilt University Medical Center.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Otero Vegas, Larissa

	Project Execution (*)
	\/_
	US\$
Direct costs	
Employees' benefits	11,521
Equipment and/or supplies	1,545
Total Direct costs	13,066
Total Indirect costs - Overhead	475
Total costs	13,541

Project execution period: From January 2018 to January 2023.

<u>Project General Objective</u>: The objective of this project is to plan the development of an pragmatic clinical trial to evaluate the optimal duration of the treatment of tuberculosis in co-infected patients with HIV as well as a reminder pills box, to increase the treatment adhesion.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# HIV Risk and Psychosocial Health Among Transgender Women In Perú

Research Project funded by federal funds of the United States of America, under subcontract with The Childrens Hospital Corporation D/B/A Boston Ch. For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Silva Santisteban, Portella Alfonso

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	9,207
Travel expenses	157
Equipment and/or supplies	16
Laboratory and patient care services	308
Other	456
Total Direct costs	10,144
Total Indirect costs - Overhead	749
Total costs	10,893

Project execution period: From August 2019 to July 2020.

<u>Project General Objective</u>: The objective of this project is a first phase that consist in a formative/qualitative research to explore the issues related to the psychosocial vulnerability of young trans women and the second phase is the survey and sample collections that are carried out to determine the prevalence of HIV, hepatitis b and c and associated factors. The design of the implementation and instruments of the second phase will consider the results of the first phase.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Using burden of treatment as a clinical indicator of barriers to multimorbidity</u> management in Perú: A mixed methods approach

Research Project funded by federal funds of the United States of America, under contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Juan Jaime, Miranda Montero / Dra. María Amalia, Pesantes Villa

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	9,206
Equipment and/or supplies	10
Total Direct costs	9,206
Total indirect costs - Overhead	164
Total costs	9,380

Project execution period: From September 2020 to June 2022.

<u>Project General Objective</u>: The treatment burden questionnaire (TBQ) will be used to evaluate BOT in patients with multimorbidity in Perú. Semi-structured interviews will also be conducted. Participants will be recruited from a variety of clinical and geographic settings. The TBQ will be applied to measure the total BOT as well as the BOT related to different dimensions of the healthcare workload. Sociodemographic characteristics and other indicators of clinical outcomes will also be evaluated. By collecting this information, we hope to better understand which patient-reported barriers to managing multimorbidity exist in Perú and which subgroups of patients, particularly those in different healthcare sectors and geographic settings, are at higher risk of experiencing high BOT.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# **Iquitos Insectary And Transmission Biology**

Research Project funded by federal funds of the United States of America, under subcontract with Yale University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Vinetz, Joseph

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	2,736
Equipment and/or supplies	5,167
Total Direct costs	7,903
Total Indirect costs - Overhead	-
Total costs	7,903

Project execution period: From September 2018 to August 2020.

<u>Project General Objective</u>: The studies imply the maintenance of a laboratory insectarium in Iquitos, Perú, and experimental infections by mosquitos with Plasmodium vivax. The funds are used for the maintenance of the laboratory, give support to the research staff in the laboratory in Iquitos, purchase of relevant supplies, identify sources of infections for experimental infections and lab analysis of experimental data.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Evaluation of urgencies, emergencies and essential neurosurgical in Perú

Research Project funded by federal funds of the United States of America, under contract with University Of Harvard.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Garcia Fúnegra, Patricia Jannet

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	225
Travel expenses	2,163
Consulting expenses	3,500
Other	764
Total Direct costs	6,652
Total Indirect costs - Overhead	1,145
Total costs	7,797

Project execution period: From July 2019 to June 2020.

<u>Project General Objective</u>: The objective of this research is to describe the existing system of response to trauma and neurosurgical emergencies and to investigate which professionals carry out these activities, training aspects, installed capacities, etc. with the aim of making recommendations that can serve to strengthen an integrated public system of response to traumas and emergencies.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Strengthening and consolidating resources for VIH prevention in the peruvian military</u>

Research Project funded by federal funds or the United States of America, under contract with Navsup Fleet Logistics Support Center.
For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Cáceres Palacios, Carlos Fernando

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	163
Training	3,601
Other	3,601
Total direct costs	7,365
Total indirect costs - Overhead	2
Total Costs	7,367

Project execution period: From March 2015 to September 2020.

<u>Project General Objective</u>: The objective of this project is to create a program focused in improving the Access to HIV prevention in military population in higher risk of four regions of the country during its first year (Lima-Callao, Piura, Iquitos and Arequipa), through the strengthening of existing resources and COPRECOS-Perú as management instance.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Isolation and identification of Cxcr4 and Cxcr7 agonists from traditional</u>

<u>Phytopharmaceuticals as potential novel drugs for mental disorders</u>

Research Project funded by federal funds of the United States of America, under contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Vaisberg Wolach Abraham Jaime

	Project Execution (*)
	( )
	US\$
Direct costs	
Equipment and/or supplies	4,741
Total Direct costs	4,741
Total Indirect costs - Overhead	18
Total costs	4,759

Project execution period: From October 2020 to July 2022.

<u>Project General Objective:</u> The specific objectives are: to carry out the bioassay-guided fractionation of the 15 active extracts in CXCR4 or CXCR7, to dereplicate and determine the molecular structure of the isolated active compounds, and to provide outstanding students located in Perú with the opportunity to carry out their studies, theses, present your results at major international conferences and train in drug discovery research approaches.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Prevalence of vertebral fracture and bone low density in Peruvian women with VIH

Research Project funded by federal funds of the United States of America, under subcontract with Yale University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Garcia Fúnegra Patricia Jannet

	Project Execution
	(*)
	US\$
Direct costs	
Equipment and/or supplies	30
Laboratory and patient care services	2,934
Other	50
Total Direct costs	3,014
Total Indirect costs - Overhead	319
Total costs	3,333

Project execution period: From September 2019 to June 2020.

<u>Project General Objective</u>: The objective of this research is to enroll a cohort of HIV-positive women and HIV-negative women with the community in Lima, Perú, and compare the prevalence of vertebral fracture and bone mineral low density, identifying similarities and differences in regard to risk factors associated in both groups.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Peruvian/Brazilian amazon center of excellence in malaria (Transmission dynamics of residual malaria in the amazon)</u>

Research Project funded by federal funds of the United States of America, under subcontract with University of California, San Diego.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution (*)
	05\$
Direct costs	
Employees' benefits	41
Other	966
Total Direct costs	1,007
Total Indirect costs - Overhead	1,763
Total costs	2,770

Project execution period: From July 2017 to March 2024.

<u>Project General Objective</u>: The objective of this research is to identify risk factors for residual malaria infection and disease at both the individual and household level, will supply parasite samples for detailed population-level molecular analyses and epidemiological data to develop new mathematical models of malaria transmission.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Building sustainable and innovative research in cancer and cardiovascular disease:
Planning the design and development of the south american center of research
excellence to counter NCDs (SACREN)

Research Project funded by federal funds of the United States of America, under subcontract with Instituto de efectividad clínica y veterinaria LEC. For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Miranda Montero, Juan Jaime

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	1,737
Other	82
Total Direct costs	1,819
Total indirect costs - Overhead	502
Total costs	2,321

Project execution period: From September 2017 to May 2020.

<u>Project General Objective</u>: The objective of this research will be to implement research programs and improve activities related to the prevention and control of cardiovascular diseases and cancer. SACREN (south-american center of excellence in research of chronic non-communicable diseases, per english acronym) will promote the sciences of the implementation and population research and also identify the disparities in the access and coverage of screening and diagnosis methods, particularly in vulnerable populations.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Addressing the global burden of leptospirosis in two endemic countries

Research Project funded by federal funds of the United States of America, under subcontract with University Of California, San Diego.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Torres Fajardo, Katherine Jessica

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	<u>-</u>
Total Indirect costs - Overhead	2,011
Total costs	2,011

Project execution period: From September 2015 to February 2020.

<u>Project General Objective</u>: The objective of this research is to develop and validate new tools and approaches to reduce the impact of leptospirosis in human health.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Translational research development for endemic infectious diseases of amazonia

Research Project funded by federal funds or the United States of America, under subcontract with University of California, San Diego.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution (*)
	US\$
Direct costs	
Other	914
Total direct costs	914
Total indirect costs - Overhead	816
Total Costs	1,730

Project execution period: From May 2016 to February 2021.

<u>Project General Objective</u>: The goal of this new project infectious disease research training program, with focus on training candidates from Iquitos (Universidad Nacional de la Amazonia Peruana). This research training program, explicitly focuses on augmenting and sustaining research capacity in emerging and major endemic infectious diseases in Perú, particularly those found in the Peruvian Amazon. This training program will be particularly focused on infectious diseases that are associated with substantial morbidity and mortality in the Peruvian Amazon.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Experiences of drug consumption in patients that receive targa in a national hospital of Lima – Perú 2018

Research Project funded by federal funds of the United States of America, under contract award Project Paracas - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Román Sulca, Silvia

	Project Execution
	(*)
	US\$
Direct costs	
Travel expenses	111
Laboratory and patient care services	1,563
Total Direct costs	1,674
Total Indirect costs - Overhead	1
Total costs	1,675

Project execution period: From October 2019 to May 2020.

<u>Project General Objective</u>: The objective of this research is to understand the consumption experiences of drugs in patients that receive targa in a hospital of lima 2018.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Peruvian/Brazilian amazon center of excellence in malaria (Spatiotemporal Adaptation of Anopheles Darlingi in diverse ecological)</u>

Research Project funded by federal funds of the United States of America, under subcontract with University of California, San Diego.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	(142)
Total Direct costs	(142)
Total Indirect costs - Overhead	1,313
Total costs	1,171

Project execution period: From July 2017 to March 2024.

<u>Project General Objective</u>: This project will address three understudied facets of An. darlingi which will provide key details of how this vector maintains its dominant role in Amazonian malaria transmission dynamics by: 1) delineating the importance of anthropogenic breeding sites that lead to high mosquito productivity and dispersal near human habitation; 2) examining rapid adaptation in modified landscapes of both location (indoor/outdoor) and nocturnal timing of biting behavior; and, 3) showing how this mosquito species' preferences/ changes interact with Plasmodium vivax asymptomatic persons to maintain hypoendemic transmission.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

# STATEMENT OF EXPENDITURE

# Sexual education for teenagers

Research Project funded by federal funds of the United States of America, under direct subcontract with UCLA.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Condor Cámara, Daniel Flavio

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	174
Travel expenses	172
Other	435
Total Direct costs	781
Total Indirect costs - Overhead	-
Total costs	781

Project execution period: From June 2018 to December 2020.

<u>Project General Objective</u>: The objective of this research is to evaluate the acceptability and feasibility of a group sexual health education intervention for young people living with HIV and their caregivers, evaluate the initial effectivity of the intervention group in sexual health education regarding knowledge, attitude and take risks of sexual health of young people living with HIV and their caregivers.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Effectivity of the intervention with text message in the collection of medicine and retention in the care of young adults living with HIV in a hospital of Lima

Research Project funded by federal funds of the United States of America, under contract with Paracas award - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gonzalez Lagos, Elsa

	Project Execution
	(*)
	US\$
Direct costs	
Employees' benefits	777
Total Direct costs	777
Total Indirect costs - Overhead	-
Total costs	777

Project execution period: From September 2019 to April 2020.

<u>Project General Objective</u>: The objective of this Project is the interventions with text messages (sms) to improve the retention in care.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Impact in children regarding environmental mercury and human exposure

Research Project funded by federal funds of the United States of America, under subcontract with University at Albany, State University of New York. For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Miranda Montero, Juan Jaime

	Project Execution (*)
	US\$
Direct costs	
Travel expenses	613
Equipment and/or supplies	8
Other	7
Total Direct costs	628
Total Indirect costs - Overhead	-
Total costs	628

Project execution period: From June 2019 to February 2021.

<u>Project General Objective</u>: In this proposal, we are going to test our main hypothesis that the child is associated with a major exposure of MEHG in the communities near mape.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Amazonian center of excellence in malaria research (Immunology of asymtomatic malaria and the effects of immunity on plas)

Research Project funded by federal funds of the United States of America, under subcontract with University of California, San Diego.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution
	(*)
	US\$
Direct costs	
Other	218
Total Direct costs	218
Total Indirect costs - Overhead	329
Total costs	547

Project execution period: From July 2017 to March 2024.

<u>Project General Objective</u>: The objective of this project is to compare the inflammatory response and responsiveness of innate immune cells from clinically ill and asymptomatic malaria patients.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

# STATEMENT OF EXPENDITURE

# Amazonian center of excellence in malaria research (Core B - Data Management)

Research Project funded by federal funds of the United States of America, under subcontract with University of California, San Diego.
For the period from 1 January 2020 to 31 December 2020

Researcher: Dra. Gamboa Vilela, Dionicia

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	<u> </u>
Total Indirect costs - Overhead	449
Total costs	449

Project execution period: Desde julio 2017 hasta marzo 2024.

<u>Project General Objective</u>: TThe objective of this Project is to formalize the institutional routes and networks to report and respond to incidents of violence against trans people.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Universal biomarkers for plasmodium vivax exoerythrocytic infection

Research Project funded by federal funds of the United States of America, under direct contract with University of California.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Calla Choque, Jaeson Santos

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	-
Total Indirect costs - Overhead	89
Total costs	89

Project execution period: From July 2018 to June 2020.

<u>Project General Objective</u>: The goal of this research is to create better reagents for p. Vivox drug dicovery, to create biomarkers for p. Vivox infections that can lead to new diagnostic tests, and the study of vivox hypnozoites with the aim of finding new pharmacological pathways.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

## Inter-American training for innovations in emerging infectious diseases

Research Project funded by federal funds of the United States of America, under subcontract with Tulane University.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Zimic Peralta, Mirko

Project Execution
(\*)

US\$

Direct costs

Employees' benefits 42

Total direct costs 42

Total indirect costs - Overhead 35

Total costs 77

Project execution period: From September 2016 to August 2020.

Project General Objective: This training program will build teams of interdisciplinary Researchers who can creatively and sustainably tackle the problems of emerging infectious diseases by developing cost-effective tools that can be applied effectively in Latin America and other developping parts of the world; therefore, the proposed program is of great importance to public health. The primary objective of this program is to provide post-doctoral students with tutored training experiences and opportunities to work together as a team to identify problems in the diagnosis, management, or control of infectious diseases. Emerging infectious diseases, such as tuberculosis, malaria and Chagas disease, present significant public health problems in countries with limited resources and are a growing problem in more developed countries.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

<u>Paracas Award: Consulting effectivity in nursey in the improvement of haart adherence in patients with HIV and alcohol consumption behavior</u>

Research Project funded by federal funds of the United States of America, under contract with award of Project Paracas.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Echevarría Zarate, Juan

	Project Execution (*)
	US\$
Direct costs	
Employees' benefits	60
Other	11_
Total Direct costs	71_
Total Indirect costs - Overhead	-
Total costs	71

Project execution period: From March 2017 to may 2020.

<u>Project General Objective</u>: The objective of this research is to determine the effectiveness of nursing counseling in improving the targa adherence in patients with HIV and alcohol consumption behaviour.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Socio-technical approach of systems to improve the diagnosis of tuberculosis through the use of mobile technologies in health

Research Project funded by federal funds of the United States of America, under subcontract with University of Massachusetts Lowell.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Ugarte Gil, Cesar Augusto

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	-
Total Indirect costs - Overhead	38
Total costs	38

Project execution period: From April 2018 to May 2020.

<u>Project General Objective</u>: The objective of this research is to evaluate both the performance of the algorithm of visual patterns detection of tuberculosis in thorax x-ray images, using the computer tools named ERX algorithm, as the health worker use the tools, through field tests using an ERX app.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Addressing hypertension and diabetes through community-Engaged systems in Puno, Perú (Andes study)

Research Project funded by federal funds of the United States of America, under direct contract with National Institute of Health - NIH.

For the period from 1 January 2020 to 31 December 2020

# Researcher: Dr. Germán Málaga / Dra. Stella Hartinger

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	-
Total Indirect costs - Overhead	35
Total costs	35

<u>Project execution period</u>: From September 2020 to August 2022.

<u>Project General Objective</u>: Project based on a multi-component community intervention to address arterial hypertension (HT) and diabetes mellitus 2 (DM-2), in rural communities in the city of Puno. The intervention will be evaluated to verify its effectiveness and ensure future adoption across the country in real world settings. develop strategies and knowledge to support greater buy-in through effective implementation and scaling-up of intervention, program and policies at regional and national level, working with our partners and stakeholders, including political, economic and social elements.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

# Barriers and facilitators for the Access of health in Perú in Venezuelan migrants

Research Project funded by federal funds of the United States of America, under contract with award of Project Paracas - NIH.

For the period from 1 January 2020 to 31 December 2020

Researcher: Dr. Gonzalez Lagos, Elsa Violeta

Project Execution
(\*)

US\$

Direct costs
Other 7

Total Direct costs 7

Total indirect costs - Overhead 
Total costs 7

Project execution period: From April 2019 to May 2020.

Project General Objective: The objective of this research is to Explore the barriers that Venezuelan migrants with HIV face in accessing health services in Perú, and the facilitators required to allow their access. Understand the barriers that exist for Venezuelan migrants with HIV to access health services in Perú, identify the facilitators required by Venezuelan migrants with HIV to access health services in Perú. Determine the frequency of socioeconomic, demographic, cultural, geographic, and administrative factors that could be interfering or favoring access and the processes required to obtain comprehensive medical care for Venezuelan patients with HIV and prepare and validate an informational instrument or triptych to facilitate navigation or access for Venezuelan migrant patients with HIV.

# UNIVERSIDAD PERUANA CAYETANO HEREDIA

## STATEMENT OF EXPENDITURE

Molecular epidemiology of salmonella isolated resistant to bird production as contamination risk to the human Lima, Perú

Research Project funded by federal funds of the United States of America, under direct subcontract with University Of California.

For the period from 1 January 2020 to 31 December 2020

## Researcher: Dr. Lescano Guevara, Andres Guillermo

	Project Execution (*)
	US\$
Direct costs	-
Total Direct costs	-
Total Indirect costs - Overhead	6
Total costs	6

Project execution period: From July 2018 to June 2020.

<u>Project General Objective</u>: The objective of this research is to identify and characterize the salmonella isolates obtained from poultry production in order to implement biosecurity measures and prevent human contamination. Microbiological methods and molecular tools will be used for the characterization and identification of genetic diversity. In addition, isolates of clinical cases obtained in hospitals will be used. Molecular tools will allow evaluating the possibility that these isolates are related to those obtained from avian sources.

#### IV. BACKGROUND AND SCOPE OF THE WORK

Our work was to perform an audit for the review of the expenses of Research Projects financed by federal funds of the United States of North America, for the period from 1 January 2020 to 31 December 2020. The audit included the exam of the Expenditures Statements of each Research Project, performed in accordance with the Generally Accepted Government Auditing Standards (GAGAS), International Audit Standards (IAS) and the compliance supplement of the Office of Management and Budget – OMB of the United States of America – Circular A 133. Accordingly, we applied the procedures, standards and guidelines of Universidad Peruana Cayetano Heredia's policies in regards to procedures, justification and control of the Research Projects' expenditures and other audit procedures that we may consider necessary.

#### Scope of the audit

The scope of our audit work includes the review of all the expenditures transactions from 1 January 2020 to 31 December 2020. As part of a preliminary review and to determine an appropriate control environment, we review the following documents:

- Agreements subscribed between Universidad Peruana Cayetano Heredia and the National Institute of Health – NIH.
- Subcontracts subscribed between Universidad Peruana Cayetano Heredia and the universities of the United States of America, which are financed by NIH and subcontract the UPCH's services in order to carry out researches.
- · Progress reports of the projects.
- Organization charts.
- · Accounting systems.
- Policies and procedures of acquisitions, purchases and contractings.

The review of the Statements of Expenditures of each project financed by NIH, including the budgeted amounts, reported expenses and compliance of the procedures established in the contracts and subcontracts.

The review of the proper justification of expenses incurred by the audited projects, which have original documentation that may support the expenses.

The review of the procedures of purchase, goods acquisiton, tenders and quotes

The review of the staff contracting procedures in payroll and social benefits.

The review of the procedures of services provided by third parties, contracts, technical reports, service conformity certificates, according to the nature of the service.

As part of our audit we considered the following standards:

- Standard Statement of Work for financial audits of NON-US organizations contrated.
- Normas de Auditoría Gubernamental Generalmente Aceptadas de los Estados Unidos de América (GAGAS, por sus siglas en inglés).
- El Suplemento de cumplimiento de la Oficina de Administración y Cumplimiento (OMB –
  Office of Management and Budget) de los Estados Unidos de América Circular A 133.
- Las Normas Internacionales de Auditoría (NIA).

#### V. FINANCIAL, ACCOUNTING AND ADMINISTRATIVE VERIFICATION

#### 5.1 Main accounting policies

The main policies adopted by Universidad Peruana Cayetano Heredia during the preparation and presentation of the Statements of expenditures of the Research Projects have been applied consistently and are the following:

a. Preparation basis of the Statements of expenditures Statementsof expenditures are expressed in U.S. dollars, and have been prepared based on the execution/expense, which implies that theses are recognized when met.

## b. Foreign currency and Exchange rate

Accounting transactions are registered in the currency of the Research Projects (U.S. dollars), for the preparation purposes of the Research Projects' statements of expenditures.

For the translation of the expenses made in local currency to U.S. dollars, the exchage rate at the date where the expense was registered.

## 5.2 Expenditures review of Research Projects

The date of the expenses documentation correspond to the period subject to review from 1 January 2020 to 31 December 2020. These expenses documentation of Research Projects were verified to see if they had included the expenses made with the funds provided to the Research Projects, matter of our audit.

## Formal requirement of the expenses

We verified all the original documents; invoices, receipts and other supporting documentation of expenses including within each entry, where the information is organized by expense date, and are also registered in the Statement of expenditures and the accounting registries of Universidad Peruana Cayetano Heredia.

We verified expenses from contracting staff devoted partial or totally to the Project, including salaries, social insurance, bonuses, vacations, severance payment and other labor benefits according to law.

We verified that national staff contracting complied with national regulations and according to employment contracts duly certified by the Labour Ministry and Employment Promotion, which specify obligations, contracting modality, professional category and salary.

We verified that employees' payroll payments are made monthly for each entity providing the corresponding payments stubs as established by the pay Labour Law, complying with the payment of bonuses, severance payment, vacations and insurance Essalud. The allocation of employees' salary depends if this person is an administrative employee or in charge of research functions as Administrative employees have fixed salary and researches receive a fixed part and other amount corresponding to research projects in which they participate.

We verified that the monthly provisions of social benefits: bonuses, severance payment and vacations were performed.

The withholdings for pension funds, insurances and taxes are made according to the calcultion detailed and are paid to the collecting entity (AFPs, SUNAT) within the timeline established by the Peruvian Labour Law.

The Universidad Peruana Cayetano Heredia keeps files where it is possible to find in an orderly way: employees' contracts, payment stubs properly signed, with payment certificates of social benefits, withholding certificates for taxes, social security payments, tax payments, payroll payment and pension funds payment.

We verified that the staff file has: request of staff recruitment, staff contracts, verification listo for the contracts, staff unique file, police record, domicile certificate, copy of the National identity DNI or certificate of alien, resume, copy of degree and/or titles, diplomas, certificates of studies.

We verified that the staff contracts are duly signed, digitalized and filed in a file synchronized to the cloud of Universidad Peruana Cayetano Heredia.

We verified that travel expenses are supported by the liquidation of food, accommodation, transportation and trips made only for staff with labour purposes with justifying list and invoices, receipts and affidavits.

We verified sufficiently and properly the existance of the expsense, confirming the reality and quality of the expense corresponding to a transaction or action verifying the proof of work done, products received or services provided regularily, of acceptable quality and at agreed and reasonable prices and costs.

## VI. INTERNAL CONTROL

We reviewed and evaluated the internal control of Universidad Peruana Cayetano Heredia, in regards to the Research Projects, in order to obtain enough understanding of the design of policies and control procedures, and if such policies and procedures have been applied.

The most important audit procedures applied for the evaluation of internal control is detailed as follows:

- a. Obtain enough understanding of the internal control in order to plan the audit and determine the nature, opportunity and scope of the tests to be performed.
- b. We evaluated the inherent risk and the risk of control, and we determined the combined risk combinado. The inherent risk is the susceptibility of an assertion, such as the balance of an account, a material incorrect statement, assuming that there are no policies nor procedures in the internal control regarding the assertion. Control risk is the risk that implies that a material wrong statement may occurred in an assertion and may not be timely prevented or detected by the internal control of Universidad Peruana Cayetano Heredia, its policies or procedures. The combined risk is the risk of not detecting a material error that exists in an assertion. The combined risk is founded in the efficiency of the audit procedure and its application by the auditor.
- c. We summarize the risk evaluations for each material assertion in the working papers. The risk evaluation have considered the following general categories where each assertion shall be classified:
  - Integrity
  - Existance
  - Accuracy
  - Valuation
  - Obligation
  - Presentation
- d. We evaluate the control environment, the sufficiency of the accounting system and the control procedures. It was emphasized in the policies and procedures applicable to policies and procedures regarding the capacity of Universidad Peruana Cayetano Heredia to register, process, summarize and report financial information consistent with the assertions contained in each account of the Statement of accountability.

For such effects, we evaluated among other things the control systems to:

- i. Ensure that the charges to the program are appropriate and are duly documented;
- ii. Acquisition of goods and services;
- iii. The administration of the staff functions such as time control, salaries and benefits;
- iv. The administration and disposition of goods (such as equipments and supplies, among others) acquired for the Research Projects; and
- v. Ensure the compliance with the terms of the subcontracts, laws and regulations applicable that have a collective and material impact in the STATEMENT OF EXPENDITURE.

# VII. COMPLIANCE WITH THE TERMS OF CONTRACTS, SUBCONTRACTS, LAWS AND APPLICABLE REGULATIONS

To perform the compliance evaluation with the terms of the contracts, subcontracts, laws and regulations applicable, we design and audit plan that considered among other aspects, the development of the following procedures:

- a. On a selective basis, we identified the terms of the contracts, subcontracts, the laws and regulations applicable, and we determine which if not observed, may have a direct and material effect on the STATEMENT OF EXPENDITURE. For those effects:
  - i. We have enumerated all the impartial and specific clauses of the program included in the subcontracts which cumulatively, if not complied with, may have a direct and material effect on the STATEMENT OF EXPENDITURE.
  - ii. We have evaluated the inherent and control risk regarding the occurrence of a material non-compliance for each compliance requirement.
  - iii. We determine the nature, opportunity, and duration of the audit procedures to perform tests that determine if there are errors, irregularities and ilegal acts, that provide a reasonable safety of detecting intentional or non-intentional non-compliance cases in regards to the terms of applicable subcontracts, regulations and laws that may have a material effect in the STATEMENT OF EXPENDITURE.
- b. Based on our sample, we determined if the payments were made in accordance with the terms applicable to the contracts, subcontracts, laws and regulations.
- c. Based on our sample, we determined if the funds were spent for non-authorized purposes or are not in accordance with the terms applicable to the subcontracts.
- d. Based on our sample, we determined if the reports of the Statement of expenditures of the Project, advances and reimbursement requests contain information that is supported by the accounting books and registries.
- e. We determine a non-statistical selection of documents as samples of expenses, where we have:
  - Verified if the incurred expenses for the research projects have been authorized and/or approved by the main researcher, presenting the proper supporting documentation.
  - ii. Verified that the internal controls applied by the University for the acquisition of goods and services were complied in accordance with the levels of approbal and minimum amount required of quotes.
  - iii. Validated that there are contracts for the acquisition of a good or service, that the deadlines established are met and the existence of service conformity or reception of the good.
  - iv. Verified the existance of the original payment receipts (Invoices, receipts, tickets, others).
  - v. Verified that the documents that support the expense do not have amendments.

- f. We determined a non-estatistical selection of documents as sample of deliveries to be reported, where we have:
  - Verified if the deliveries to report for the research projects have been authorized and/ or approved by the main researcher, presenting properly the supporting documentation.
  - ii. <u>Validated that all the money has been transferred and reported in the estimated time by the requesting person</u>.
  - iii. Verified the transfer to the Universidad Peruana Cayetano Heredia account, to reimburse the excess of delivery to be reported.
- g. We determined a non-estatistical selection of documents as sample of contractual expenses, where we have:
  - i. Confirmed that the invoice is accompanied by the details of the expenses incurred and that these were approved by the Administration General Department – DGA to be submitted to the funding entity.
  - ii. Validated that the deadlines established in the subcontarct were complied with, for the presentation of the operating reports to the funding entity.
- h. We determined a non-estatistical selection of documents for the projects, where we have:
  - i. Confirmed the compliance of the submittance of operating and financial reports to the funding entity through the system Era-commons.
  - ii. Verified that the Overhead estimation is in accordance to the guidelines of NIH, and transfered to the costs centers and used for the purposes established according to the University board of directors.
- i. We determined a non-estatistical selection of documents as sample of assets acquisition, where we have:
  - Verified the compliance of the NIH standards in the classification of assets in expenses higher than US\$ 5'000, other minor expenses would be considered supplies.
  - ii. Validated that the assets acquired with the funding of the projects, have been properly coded and inventoried by the University and registered in the accounting.
- j. We determined the opened and closed projects in 2020, where we have:
  - i. Review the opening procedures of the projects and that the begining dates match with the contracts and subcontracts.
  - ii. Review the contracts, subcontracts and adendum to determine the closure date of each of the research project.
  - iii. Verified the compliance of the Board of directos of Projects' closure.
  - iv. Verified the Accounting closure of the project's costs center.

#### VIII. OPPORTUNITIES OF IMPROVEMENT AND RECOMMENDATIONS

## 8.1 ACCESS TO THE PROJECTS PLATFORM

During our Audit procedures, we have evidenced the shared use of a User and Password assigned to an Administrative Coordinator for the management and administration of projects (registration of items for projects, control and approval of executed expenses, component assignments, among others). The identified cost centers are the following:

Cost Center	N° Project	Type of contract	Amount assigned
230305012020	5	GRANT/AWARD	\$218,847.65
230305012053	18	GRANT/AWARD	\$126,930.18
230305012056	1	GRANT/AWARD	\$359,480.35
230305012062	15	GRANT/AWARD	\$144,965.07
230305052053	2	SUBAWARD	\$342,984.55
230305052092	23	SUBAWARD	\$109,581.13
240505012033	9	GRANT/AWARD	\$189,996.71
240505052028	24	SUBAWARD	\$104,663.50
240505052036	14	SUBAWARD	\$157,309.77
240505052051	16	SUBAWARD	\$137,153.83

## Recommendation:

Although it is true that the provision of the Username and Password is responsibility of the Administrative Coordinator, we suggest that access to the "Project" must be independent. The Administrative Coordinator must manage the accesses for his/her staff; if necessary.

Likewise, the IT area must ensure the proper use of the Username and Password for each person in charge.

# Comments of Universidad Peruana Cayetano Heredia:

PProyectos users are assigned taking into account in the first instance the person who has the position of "administrative coordinator" of each project. Similarly, in some cases there are administrators who have working groups to whom they assign control and use of the Pproject for certain projects.

The exceptional case is presented in which the administrator of the projects in question has a working group under his/her responsibility, to whom she has assigned the operational management and validation of the Project of some cost centers.

As of today and based on the formal request of the project administrator and in order to meet this recommendation, the software access accounts have been created for each of these three users, as well as the granting of the access to the corresponding cost centers

It is important to specify that all PProyectos users are responsible for their personal password and correct use. And that it is not possible to modify through its use the transactions registered in the accounting.

## **Comments of the Auditor**

Implemented.

## 8.2 ASSIGNMENT OF COMPONENTS IN THE PPROYECTOS PLATFORM

During our Audit procedures, in Project N  $^{\circ}$  24 (Cost Center 240505052028), a Federal Financial Report (FFP) was issued, to request reimbursement of executed expenses; however, in the "PProyectos" Platform, the "component allocation" process was not -carried out, so that in the "Budgeted vs. Executed" report no movement of expenses was generated during the period of our review.

## Recommendation:

Although it is true this process has been regularized during our review, we suggest to implement a monthly control procedure that allows verifying the correct allocation of components in the different projects to comply with all the processes in the "PProyectos" platform, under the responsibility of the Administrative Coordinator and obtain adequate and timely information when a report is requested

# Comments of Universidad Peruana Cayetano Heredia:

All administrative coordinators are aware that the economic management of research projects is carried out through the PProyectos software. Likewise, we have been permanently urging all users to give it permanent and 100% use of the software. Following the recommendation, this case, as mentioned, was corrected in internal control.

A medium-term version of Web PProyectos that includes queries for the list of validated projects and the assignment of components is being implemented.

# **Comments of the Auditor**

Implemented.

# IX. FOLLOW-UP TO RECOMMENDATIONS FROM PREVIOUS YEARS

Below are the recommendations resulting from previous years, and his current situation:

Recommendations	Year	Current Situation
Cost of staff in the Research Project	2016	In process (*)
2. There is no uniformity in the closing procedure of cost		
centers when Universidad Peruana Cayetano Heredia is	2019	In process (*)
subcontracted.		
3. Information update of projects in the projects registry	2020	Implemented
system SIDISI	2020	implemented
4. Non-reconciled expenses related to the entries of	2020	Implemented
employees benefits	2020	implemented

(\*) As of today, this process has not been implemented yet.