

The impact of the COVID-19 pandemic on medical education: adaptability and remote learning experience of the Peruvian American Medical Society

El impacto de la pandemia del COVID-19 en la educación médica: adaptabilidad y experiencia con enseñanza a distancia de la Sociedad Médica Peruano Americana

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Abstract

The COVID-19 pandemic had a significant impact on medical care and medical education in Peru. In response, the Peruvian American Medical Society (PAMS), a charitable medical organization based in the USA, pursued its medical and educational missions in Peru by adopting virtual learning technology. We developed closer collaborative relationships with several medical schools and the Peruvian Association of Medical Schools (ASPEFAM) while offering a faculty panel of twenty-four members to provide lectures and multidisciplinary webinars in Spanish. We conducted 19 webinars including COVID -19 and non-COVID -19 related topics that over the last two years attracted 14,489 participants from 23 countries. They were the foundation for twenty publications in Peruvian medical journals. Our clinical investigations competition was positively received as was our pilot project on research mentorship. The COVID -19 pandemic had a positive effect on the educational mission of PAMS in Peru.

Keywords: COVID-19; Medical Education, Medical Informatics; Medical Schools; Peru (Source: MeSH).

Resumen

La pandemia del COVID-19 tuvo un impacto significativo en el cuidado y la educación médicos en el Perú. En respuesta, la Sociedad Médica Peruano Americana (PAMS), una organización médica benéfica con sede en los EE. UU., adoptó sus misiones médicas y educativas en Perú usando estrategias virtuales. Desarrollamos colaboración con varias facultades de medicina y la Asociación Peruana de Facultades de Medicina (ASPEFAM) y ofrecimos un panel de veinte y cuatro miembros para brindar conferencias y seminarios multidisciplinares en español. Hicimos 19 seminarios, incluyendo temas relacionados y no relacionados al COVID-19, que en los últimos dos años atrajo a 14 489 participantes de 23 países. Ellos fueron la base de 20 publicaciones en revistas médicas peruanas. Nuestro concurso de investigaciones clínicas y nuestro proyecto piloto de mentoría de investigación fueron recibidos positivamente. La pandemia del COVID-19 tuvo un efecto positivo en la misión educativa de PAMS en Perú.

Palabras clave: COVID-19; Educación Médica; Informática Médica; Facultades de Medicina; Perú (fuente: DeCS BIREME).

INTRODUCTION

The Peruvian American Medical Society (PAMS) is a charitable non-for-profit organization created by Peruvian physicians in Atlanta, Georgia, in 1973. Its objectives were to improve the medical care of Peruvians in Peru, especially of those in greater need and, to improve medical education in Peru.

The medical care objective has been met through 15 to 20 annual medical missions originating in the US and arriving to many areas of Peru. The medical education objective has been met first by efforts in the 80s and 90s to promote the need for medical school's accreditation in Peru and, by a series of in-person lectures and symposia conducted over the years in Peru ⁽¹⁾. Our medical missionary and educational activities were affected significantly by the pandemic. We described in this report some of the medical education challenges and opportunities observed during that period.

The pre-pandemic educational experience of PAMS consisted of sporadic lectures and symposia provided by PAMS members in Peru throughout the years plus two-three-day meeting sessions during each PAMS Annual Convention in Peru. These events occurred in collaboration with local hospitals and or medical schools of the area. Speakers usually came from the US, Peru, and occasionally from other countries.

The audience consisted of medical students, residents, local Peruvian physicians and visiting PAMS members. The lectures were considered of excellent quality, and they engaged the audience on relevant discussions. PAMS was responsible for the expenses associated with providing food, coffee, and beverages to the attendees throughout the meetings, as well as giving continuous medical education (CME) credits to PAMS members participating at these meetings. Considering the effort, the number of attendees was limited, often ranging from 30 to 40 and, 100 when considered successful. These meetings were therefore expensive and not cost-effective for PAMS. The objective of this communication is to share the experience of the PAMS Education Committee on adapting a virtual platform

to discharge its educational mission during the COVID-19 pandemic in Peru.

DEVELOPMENT OF THE THEME

Pandemic effect on medical school education in Peru

The effects of the pandemic on medical education were in tandem with the crisis the pandemic created in medical care. Several factors coalesced together to produce a complete collapse of the country's primary care level. To the lack of infrastructure in medical facilities, particularly those ran by the government, we should add the lack of preparedness and resources to deal with the magnitude of the crisis created by COVID-19 and the unfair competition with the rest of the world to obtain scarce personal protective equipment resources. That eventually proved futile and as a result, the medical, nursing and healthcare trainees lacked appropriate personal protective equipment that led to infection and death among them.

Another confounding factor was the "retirement" of older medical staff (senior professors considered vulnerable and with comorbid conditions) which made the medical and surgical residents receive the brunt of the crisis. Thus, health authorities and hospital leaders gave priority to the differentiated attention of COVID-19 infected patients, they removed junior trainees from the hospital systems and shifted senior residents to provide high-risk COVID-19 related care that although beneficial to afflicted patients, it compromised the capacity of medical and surgical residents to develop and acquire the necessary skills and experience needed in their areas of training ^(2,3). This experience created breaches in the training of surgical specialties that needed to be addressed to provide the additional required training ⁽⁴⁾.

Peru became the country with the highest per-capita COVID-19 death rate in the world. The risk of sickness and death from COVID-19 among healthcare providers in Peru was also extremely high. Out of a workforce of 58,404 phy-

sicians in 2020, the Peruvian Medical College reported that six months into the pandemic 3,676 physicians had become infected with COVID-19, 81 were hospitalized and receiving mechanical ventilation in intensive care units (ICU) and 170 had died ⁽⁵⁾.

Although the startup of virtual training was adequate for some medical trainees particularly in their early years, that was not the case for senior medical and surgical trainees. In response to the challenge and with the understandable uncertainty of the future, universities were forced to conduct a revamp of their medical school curriculum and introduced virtual training while facing challenges related to lack of resources and expertise among medical schools, students and teachers that made the experience stressful. In fact, the "technophobia" of faculty to learn and utilize new informatic resources became problematic ⁽⁶⁾. Universities acquired simulation units to complement the virtual experience.

PAMS response to the COVID-19 challenge

The development of the COVID-19 pandemic took place in Peru in March 2020 and evolved rapidly with immediate deleterious effects on medical and teaching facilities throughout the country. The PAMS medical missions were interrupted until further notice and discussions of alternatives for medical education were entertained by the PAMS leadership. We thought initially that we needed to develop a mutually supportive environment with Peruvian medical schools that led to the renewal and development of new agreements with 10 medical schools and the Peruvian Association of Medical Schools (ASPEFAM) (Table 1).

Our desire to assist all medical schools in Peru led to seek a collaborative agreement with ASPEFAM. Similarly, we considered most appropriate to develop a collaborative relationship with the Scientific Societies of Peruvian Medical Students (SOCIMEP). The relationship with ASPEFAM assisted us to invite all medical schools to participate on virtual presentations on COVID-19 and other

Table 1. Collaborative Agreements of PAMS with Peruvian Medical Schools

Institution
Medical School Alberto Hurtado of the Peruvian University Cayetano Heredia
Medical School San Fernando of the Major National University of San Marcos
Peruvian Association of Medical Schools (ASPEFAM)
Medical School of the Catholic University of Saint Mary of Arequipa
Medical School of the University Ricardo Palma
Faculty of Health Sciences, University Norbert Wiener
Faculty of Health Sciences, National University of Piura
Medical School of the National University of Trujillo
Medical School Hipolito Unanue of the National University Federico Villarreal
Faculty of Health Sciences, National University of the Altiplano
Faculty of Health Sciences, Private University Cesar Vallejo

relevant topics. Also, we collaborated in two events organized by SOCIMEP: 1. August 2021: CCN 2021. XXXV National Scientific Congress of Medical School Students, SOCIMEP, Tacna 2021 and, 2. January – February 2022: CAPS SOCIMEP 2022. XV Course – Workshop in Primary Healthcare & II International Workshop on Primary Care.

We developed a PAMS Faculty Lecture Resource of 24 members willing to provide each from 1 to 12 conferences of their specialty and we made it available to our collaborating medical schools and to ASPEFAM to assure all medical schools could benefit from this resource. Most importantly, we developed multidisciplinary webinars on COVID – 19 and non-COVID- 19 related topics and sought sponsorship for webinars from medical schools, Peruvian Medical College, and other organizations of interest. We obtained sponsorship from PAMS, School of Medicine Alberto Hurtado of the Peruvian University Cayetano Heredia, School of Medicine San Fernando of the Major National University of San Marcos, ASPEFAM, Peruvian College of Physicians, Catholic University of Santa Maria in Arequipa, National University of Piura and, International Association of Telehealth and Telemedicine.

PAMS multidisciplinary Webinars

Up until September 2022, we conducted 19 successful multidisciplinary webinars with the registration of 14,489 professionals in 23 countries from North, Central and South America as well as Europe and Australia (Table 2). The topics included ten COVID – 19 and nine non-COVID – 19 related subjects.

Because of the interest of timing these presentations to the evolution of our knowledge on COVID-19, we presented sequentially the clinical manifestations and management of COVID -19 in major medical centers in the US; the involvement of the lungs, heart, kidney, and hematologic system by the infection and, the clinical features of COVID-19 in children. We presented discussions on the different treatment opportunities available at that moment in time such as antivirals, convalescent plasma and, use of new anti-COVID-19 vaccines in the general population and in special clinical settings such as pregnancy, children, and the immunocompromised hosts. Most recently, we turned our attention to the understanding of the development of COVID-19 variants and the potential beneficial role of established and evolving anti COVID-19 vaccines.

Among non-COVID-19 related topics we have held multidisciplinary discussions of topics of interest in Peru such as gastric cancer, fatty liver, treatment of antibiotic resistant infections, hypertension, and congenital heart disease. We have published twenty scientific articles related to these presentations in Peruvian medical journals. The transmission of the webinars was made using Zoom, YouTube, and Facebook Live platforms. All webinars were registered with the American Academy of Family Physicians (AAFP) and all PAMS members who attended the webinars could receive CME credits under the auspices of the AAFP.

The quality of the webinars has been sampled in four of them and the results are very encouraging (Table 3). Starting

with webinar # 16 in April 2022, we started a prospective assessment of quality of these presentations by using audience live responses available in Zoom platform. Presenters and webinar moderators did not participate in the evaluation process. Most attendees considered the quality of these presentations to be excellent (74%), dealing with important topics (81%), that reached its meeting objectives (99%), with an appropriate content (85%) and free of commercial bias (99.5 %). We anticipate continuing the evaluation of quality in all future webinars to assure a continuing improvement process on these activities.

Promoting Clinical Research

To encourage clinical research among medical schools in Peru, PAMS instituted a clinical research competition and started a pilot project of research mentorship. For the clinical research competition, we invited eight medical schools, with which PAMS had an active collaborative agreement by December 2021, to participate on the competition with focus on their medical students, residents and newly graduates. The competition would lead to the identification of three winners, two from clinical research submissions and one from interesting case presentations, who would present their work at the PAMS Annual Convention in August 18-20, 2022. We received 41 submissions of clinical investigations and 17 case reports. The award for first place in clinical investigation was \$1,500, for second place in clinical investigations was \$1,000, and for first place in case reports was \$500. The winners presented their studies at the PAMS Convention on August 19, 2022. The details of this competition will be part of a separate report.

The Research Mentorship Program is a competitive mentorship program led by Dr. Katia Bravo-Jaimes who identified 24 early and senior career specialists in the US and Europe willing to mentor young students and/or residents in Peru in their respective areas of interest. The main objective of this effort is for each mentor-mentee match, to produce a publication of their work relevant to the Peruvian population's health within a year. Forty-six mentees have been identified

Table 2. PAMS WEBINARS 2020- 2022

N°	Date	Title of Webinar	Leaders of Webinar	Cosponsors	Number of Participants	Name of Countries Represented
1	15/05/2020	Clinical management of the critically ill adult with Coronavirus 19- The experience of the United States	"Dr. Aldo Rafael Dr. Julio Peralta"	Misión Salvando Corazones- PAMS, USA / Hospital Nacional Dos de Mayo, Lima / Instituto Cardiovascular Hispano – Dallas del Hospital Baylor, Scott & White- Dallas.	822	Argentina, Bélgica, Bolivia, Brasil, Canadá, Chile, Colombia, Cuba, Ecuador, Spain, Italy, Mexico, Nicaragua, Perú, USA, and Venezuela.
2	09/07/2020	Experience in the treatment of COVID-19 en Miami, USA: Antivirals & other therapies	Dr. Jose Gonzales	Peruvian American Medical Society	432	Argentina, Bolivia, Brasil, Chile, Colombia, Spain, Mexico, Nicaragua, Perú, USA, and Venezuela.
3	23/07/2020	Convalescent plasma in COVID 19: Round Table.	Dr. Jorge Ríos Pérez / Dr. Moises Huaman	Peruvian American Medical Society	1012	Argentina, Australia, Bolivia, Brasil, Canadá, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Nicaragua, Perú, USA, and Uruguay.
4	17/09/2020	Scientific program, Annual Convention of PAMS- Coronavirus COVID 19 Update- Day 1.	Dr. Manuel Valdivieso	"Peruvian American Medical Society, USA. Universidad Peruana Cayetano Heredia, Perú. Universidad Católica Santa María de Arequipa, Perú."	2181	Argentina, Bolivia, Brasil, Canada, Chile, Colombia, Costa Rica, Ecuador, Spain, Guatemala, Honduras, Mexico, Nicaragua, Perú, Dominican Republic, USA and Venezuela.
5	18/09/2020	Scientific program, Annual Convention of PAMS- Coronavirus COVID 19- Day 2	Dr. Manuel Valdivieso	PAMS / Universidad Peruana Cayetano Heredia / Universidad Católica Santa María de Arequipa.	1804	Argentina, Bolivia, Brasil, Canada, Chile, Colombia, Costa Rica, Ecuador, Spain, Guatemala, Honduras, Mexico, Nicaragua, Perú, Dominican Republic, USA and Venezuela.
6	21/01/2021	Gastric carcinoma. A multidisciplinary focus.	Dr. Manuel Valdivieso	PAMS / Colegio Médico del Perú/ Universidad Peruana Cayetano Heredia / Universidad Católica Santa María de Arequipa/ Instituto Nacional de Enfermedades Neoplásicas	1009	Argentina, Bolivia, Brasil, Colombia, Ecuador, Mexico, Nicaragua, Perú, San Salvador, USA, Uruguay and Venezuela.
7	25/03/2021	Vaccines against COVID-19. Update	"Dr. Maria Sjogren Dr. Jorge Rios Pérez"	PAMS / Universidad Peruana Cayetano Heredia / Asociación Peruana de Facultades de Medicina / Colegio Médico del Perú / Universidad Católica de Santa María, Arequipa.	1390	Argentina, Bolivia, Brasil, Chile, Colombia, Ecuador, Mexico, Perú, San Salvador, USA and Uruguay.
8	28/05/2021	Current themes of interest in Nephrology and Hypertension	Dr. Víctor Vladimiro Rozas.	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina "San Fernando", UNMSM / Facultad de Medicina Alberto Hurtado, UPCH / Sociedad Peruana de Nefrología / Sociedad Peruana de Hipertensión Arterial / Colegio Médico del Perú	611	Argentina, Bolivia, Brasil, Chile, Ecuador, Mexico, Perú, Nicaragua, USA and Venezuela.
9	13/07/2021	Treatment of antibiotic resistant infections	Dr. José Gonzales Zamora	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina de San Fernando, UNMSM / Facultad de Medicina Alberto Hurtado, UPCH / Facultad de Medicina UCSM, Arequipa / Colegio Médico del Perú	725	Argentina, Bolivia, Brasil, Chile, Colombia, Ecuador, Nicaragua, Perú y USA.
10	12/08/2021	Scientific program, Annual Convention of PAMS- Day 1: Impact of COVID-19 in Medical Education	Dr. Manuel Valdivieso	Peruvian American Medical Society	466	Argentina, Bolivia, Brasil, Mexico, Nicaragua, Perú, San Salvador, USA and Venezuela
11	13/08/2021	Scientific Program, Annual Convention of PAMS- Day 2: Impact of COVID- 19 in Health and Prevention	Dr. Manuel Valdivieso	Peruvian American Medical Society	339	Argentina, Bolivia, Brasil, Mexico, Nicaragua, Perú, San Salvador, USA and Venezuela
12	24/09/2021	Chronic diseases of the liver	Dra. María Sjogren	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina de San Fernando, UNMSM / Facultad de Medicina Alberto Hurtado, UPCH / Facultad de Medicina UCSM, Arequipa / Colegio Médico del Perú	642	Argentina, Bolivia, Chile, Colombia, Ecuador, Mexico, Nicaragua, Perú, San Salvador, USA and Uruguay.
13	18/11/2021	Infectious diseases, alterations of metabolism and of mental health of children during the pandemic	"Dra. Rossana Baracco Dra. Lina Huerta Saenz"	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina de San Fernando, UNMSM / Facultad de Medicina Alberto Hurtado, UPCH / Facultad de Medicina UCSM, Arequipa / Colegio Médico del Perú	439	Argentina, Bolivia, Brasil, Dominican Republic, Nicaragua, Perú, USA and Venezuela.
14	17/02/2022	COVID – 19: Morbidity and mortality around the world. Travel recommendations	"Dra. María Sjogren Dr. Luis Espinoza"	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina de San Fernando, UNMSM / Facultad de Medicina Alberto Hurtado, UPCH / Facultad de Medicina UCSM, Arequipa / Colegio Médico del Perú	552	Argentina, Bolivia, Chile, Colombia, Ecuador, Guatemala, Mexico, Nicaragua, Panama, Perú, USA, and Venezuela.
15	21/04/2022	Congenital cardiopathies	"Dr. Juan Alejos Dr. César Aranguri"	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina "San Fernando", UNMSM / Facultad de Ciencias de la Salud, UNP, Piura / Facultad de Medicina "Alberto Hurtado", UPCH / Asociación Iberoamericana de Telesalud y Telemedicina- AITT	304	Argentina, Bolivia, Brasil, Chile, Colombia, El Salvador, Spain, USA, Nicaragua and Perú.
16	13/05/2022	PAMS program of mentorship on investigations- 2022	Dra. Katia Bravo	Peruvian American Medical Society	311	Argentina, Bolivia, Spain, USA, Mexico, Nicaragua, and Perú.
17	16/06/2022	Vaccination against COVID- 19 in special populations and status of the vaccination in Peru	"Dr. José Gonzales Zamora Dr. Manuel Valdivieso"	PAMS / Asociación Peruana de Facultades de Medicina / Facultad de Medicina "San Fernando", UNMSM / Facultad de Ciencias de la Salud, UNP, Piura / Facultad de Medicina "Alberto Hurtado", UPCH / Asociación Iberoamericana de Telesalud y Telemedicina- AITT	390	Bolivia, Chile, Ecuador, Spain, USA, Mexico, and Perú.
18	18/08/2022	Scientific program of the Annual PAMS Convention, Day 1: Update on vaccinations and treatment of COVID-19	Dr. Manuel Valdivieso, Dr. Jose Gonzales Zamora, Dr. Maria Sjogren , Dr. Luis Espinoza	PAMS / Colegio Médico del Perú / Asociación Peruana de Facultades de Medicina / Facultad de Medicina "San Fernando", UNMSM / Facultad de Medicina "Alberto Hurtado", UPCH / Facultad de Medicina UCSM de Arequipa / Facultad de Ciencias de la Salud, UNP, Piura / Asociación Iberoamericana de Telesalud y Telemedicina- AITT	648	Argentina, Bolivia, Canada, Chile, Colombia, Ecuador, Guatemala, Mexico, Nicaragua, Perú, and USA.
19	19/08/2022	Scientific program of the Annual PAMS Convention, Day 2: Results of the scientific competition and other current themes	Dr. Manuel Valdivieso, Dr. Jose Gonzales Zamora, Dr. Maria Sjogren , Dr. Luis Espinoza	PAMS / Colegio Médico del Perú / Asociación Peruana de Facultades de Medicina / Facultad de Medicina "San Fernando", UNMSM / Facultad de Medicina "Alberto Hurtado", UPCH / Facultad de Medicina UCSM de Arequipa / Facultad de Ciencias de la Salud, UNP, Piura / Asociación Iberoamericana de Telesalud y Telemedicina- AITT	412	Argentina, Bolivia, Canada, Chile, Colombia, Ecuador, Guatemala, Mexico, Nicaragua, Perú, and USA.

All webinars, except the first , were conducted in Zoom Platform, YouTube, Facebook Live. The first was transmitted only on Zoom and YouTube. PAMS: Peruvian American Medical Society, ASPEFAM: Asociación Peruana de Facultades de Medicina, UPCH: Universidad Peruana Cayetano Heredia, UNMSM: Universidad Nacional Mayor de San Marcos, UCSM: Universidad Católica De Santa María de Arequipa.

Table 3. Evaluation of PAMS webinars.

Number of webinars evaluated		4	
Period of study	4/21/2022 to 8/19/2022		
Number of speakers	18		
Number of Evaluators	477		
Quality of presentations			
	Number	Percent	
Number of answers received	999	100	
Presentations			
Excellent	740	74	
Good	252	25	
Not too good	7	0.7	
Quality of audiovisual material			
Excellent	704	74	
Good	286	29	
Not too good	9	1	
Importance of topic			
Very important	812	81	
Important	183	18.3	
Not too important	4	0.4	
General evaluation of the webinars			
	Number	Percent	
Number of answers received	200	100	
Objectives were reached			
Yes	198	99	
No	2	1	
Content of Webinar			
Appropriate	170	85	
Too specialized	29	14.5	
Not appropriate	1	0.5	
Information free of commercial bias			
Yes	199	99.5	
No	1	0.5	

among 100 applicants. The mentees represented a variety of national and private medical schools throughout Peru. The results of this program will be reported in the future.

Final thoughts

The COVID – 19 pandemic had an impactful effect on medical education and

training in Peru and elsewhere. Its effect was modest in the early years of medical training due to the ease of introducing virtual teaching to basic science classes; however, it was much harder for students and residents in clinical years since social distancing and lack of access to patients and hospital environment interfered with appropriate medical and surgical training^(2,3,4). By impe-

ding one-on-one interactions and team specific discussions, the pandemic became the antithesis of team approach to patient care.

Due to the fragile medical infrastructure of Peru and other places where trainees could not be protected adequately, they were removed from hospital settings, thereby compromising their medical training though some of them, regardless of their area of training were shifted to care for COVID – 19 infected patients. Under these circumstances, medical schools were forced to reinvent themselves by implementing virtual classes that were often challenged by inadequate medical school Information Technology infrastructure, inequitable technology access by students and heightened stress on both students and teachers, who often needed to take crash courses to bring their ability to handle virtual education up to date. Over time, there has been a slow but progressive improvement in applying virtual techniques to medical education and, most recently, the better control of the pandemic through vaccinations have led to a return to the hospital setting experience. These are welcome news to medical training particularly in the clinical years and to those undertaking surgical training^(2,3).

Our successful virtual medical teaching and updates on COVID – 19 and non- COVID-19 related themes is evidence of the necessity to continue this type of activities to complement the limited COVID - 19 medical experience in Peru and elsewhere. This is most beneficial for the medical and basic science disciplines, but it is not designed to be a substitute to hands on experience required by surgical disciplines where manual dexterity and practice in accordance with established surgical principles are necessary.

Medical training will need to change and evolve taking advantage of technologic advances that make virtual training and updates a necessity together with advances in telemedicine and telehealth in general whereby patients are evaluated virtually and referred to the office or to the hospital for necessary hands-on evaluations and procedures not possible virtually.

The educational program of PAMS was positively impacted by the pandemic: it

became more accessible and cost-effective. Our educational webinars attracted close to 15,000 participants from Peru and Latin America as well as USA, Canada, Europe, and Australia. They resulted in 20 publications in Peruvian medical journals. Additionally, PAMS members who participated in these sessions were able to claim CME credits in the US. We are pleased that the preliminary evaluation of quality of these webinars was encouraging and positive, though we will continue assessing quality of our educational activities prospectively with the goal of improving the quality of the presentations and the themes presented.

We are promoting clinical investigations through a recently completed and successful competition that led to the submission of 58 proposals and the identification of three awardees. A competitive research mentorship program that has matched 24 mentors with 46 mentees from diverse medical schools in Peru is in process. The value of developing a culture of medical mentorship in middle income countries has been recognized internationally⁽⁷⁾. Our activities represent an early contribution to medical education and investigations in Peru and details of their implementation will be reported separately.

Our organization will combine efforts with Peruvian medical schools to enhance virtual pre- and postgraduate medical education as well as clinical investigations. We will also extend this collaboration to the Peruvian College of Physicians to continue providing virtual updates on topics of interest that will facilitate the provision of medical education credits for license renewal of physicians in Peru. The success of these efforts will benefit medical education in Peru.

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