



UNIVERSIDAD PERUANA
CAYETANO HEREDIA


UTHealth[™]
The University of Texas
Health Science Center at Houston
School of Public Health

Global Health Partnership: Students, Communities and Health Systems



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Laboratorio de Enfermedades Entéricas y Nutrición
Instituto de Medicina Tropical “Alexander von Humboldt”
Universidad Peruana Cayetano Heredia

3rd Annual
UTMB Global Health Education
Symposium



PARTNERSHIPS:

Students, Community, and Health Systems

PERU



Universidad Peruana Cayetano Heredia



Lab. de Enfermedades Entericas y Nutricion

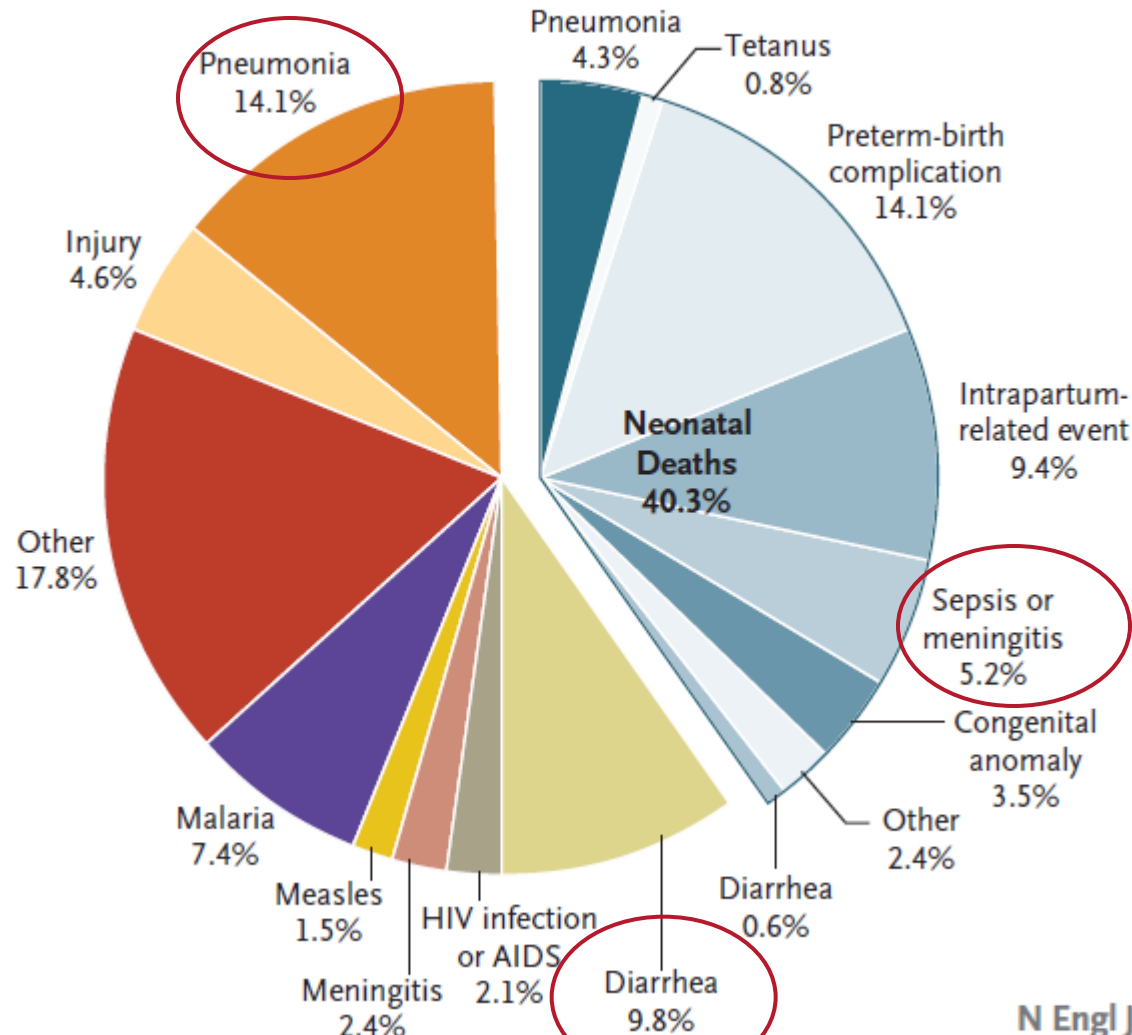


Lab. de Infectología Pediátrica

Global Maternal, Newborn, and Child Health — So Near and Yet So Far

Zulfiqar A. Bhutta, M.B., B.S., Ph.D., and Robert E. Black, M.D.

A Causes of Death in Children <5 Yr of Age



Malnutrition

Breast milk

Global Health



Worldwide **health improvement**

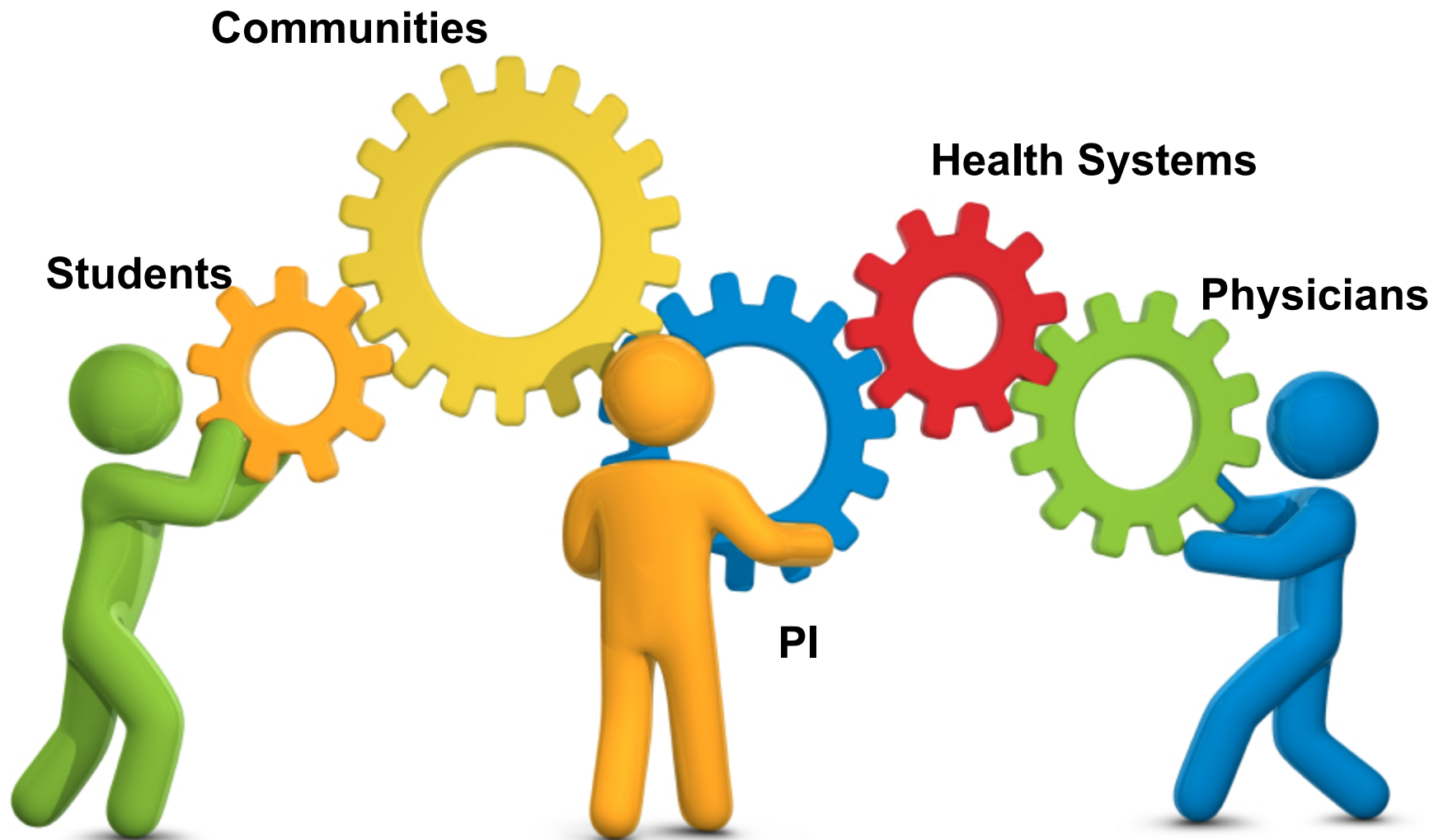
Reduction of disparities

Achieving **equity in health** for all people worldwide

Protection against global threats that disregard national borders

Partnership is an arrangement in which parties agree to ***cooperate*** to advance their ***mutual interests***





Global Health Partnership

Partnerships begin with **scoping**, or determining the need for and **goals** of partnership.



Determining the need for and **goals** of partnership

Communities



Determining the need for and **goals** of partnership

Health Systems



Determining the need for and **goals** of partnership

Students





Key elements for growing and maintaining the partnership:

- Communication between partners
- Building each others' capacity
- Collaborative attitude
- Clarity of each partners' role

Communication between partners

Randomized trial-lactoferrin prevention of diarrhea in children



Communication between partners



Communication between partners

Purified fish protein study





Invitación a padres de familia



Communication between partners

Consentimiento informado



Building each others' capacity



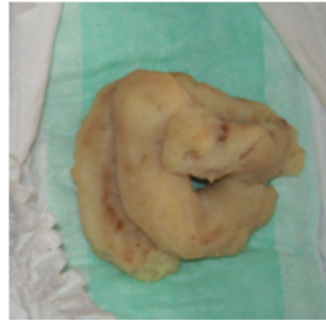
Training of personnel



TIPO DE DEPOSICIONES



DURAS: Como bolitas duras



FORMADAS: Tienen una forma definida



PASTOSAS: Son blandas o suaves.
NO son formadas. Semejante a la arcilla



SUELTAS O SEMILIQUIDAS: Son deposiciones NO formadas, muy blandas. Contienen algo de agua. Semejante al "locro"



LIQUIDAS: Son deposiciones NO formadas. Totalmente aguadas, "como agua".

Building each others' capacity



Building each others' capacity







Collaborative attitude



K01

DIARRHEA COHORT STUDIES

Cohort 1 (2007-2008):

- South of Lima
- 1034 children (2-24m)
- Passive surveillance study



Collaborative attitude



Nurses and community field workers



Lactoferrin trial research team

TEAM WORK !!



Enteric Diseases Lab

Collaborative attitude



Purified fish protein team



Neonatal sepsis prevention study



Almenara



Sabogal



Cayetano

**Location:
3 Neonatal Units in Lima,
Peru**

Collaborative attitude

NEOLACTO team



Reunión de Coordinación de Equipo NEOLACTO (25/03/2011): Lic. Marlene Caffo, Lic. Ivone Jara, Dr. Raúl Llanos, Lic. Nelly Valverde, Dra. Karen Cruz, Dra. Theresa Ochoa, Dra. Elina Mendoza, Dr. Walter Gomez, Lic. Clarisa Diaz, Lic. Rosa Atencio, Lic. Cristina Suarez, Lic. Virginia Loo, Dra. Carmen Dávila, Lic. Lourdes Tucto.



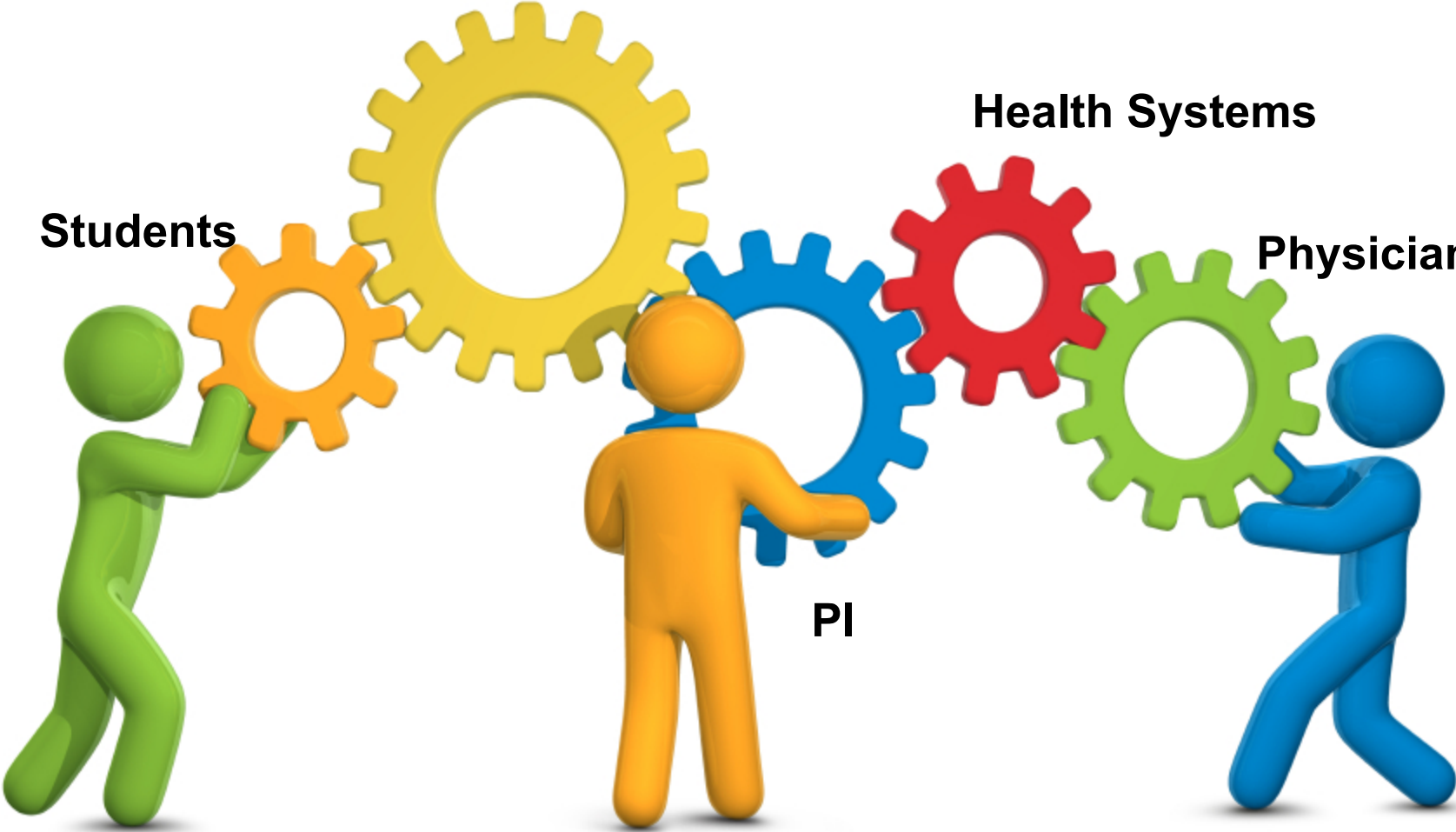


Communities

Health Systems

Students

Physicians



PI

FUNDING

We believe every person
deserves the chance to live
a healthy, productive life.



BILL & MELINDA
GATES foundation

DONATIONS

FUNDING



Grand Challenges Canada™
Grands Défis Canada™



wellcome trust

*Institute for Collaboration
in Health*

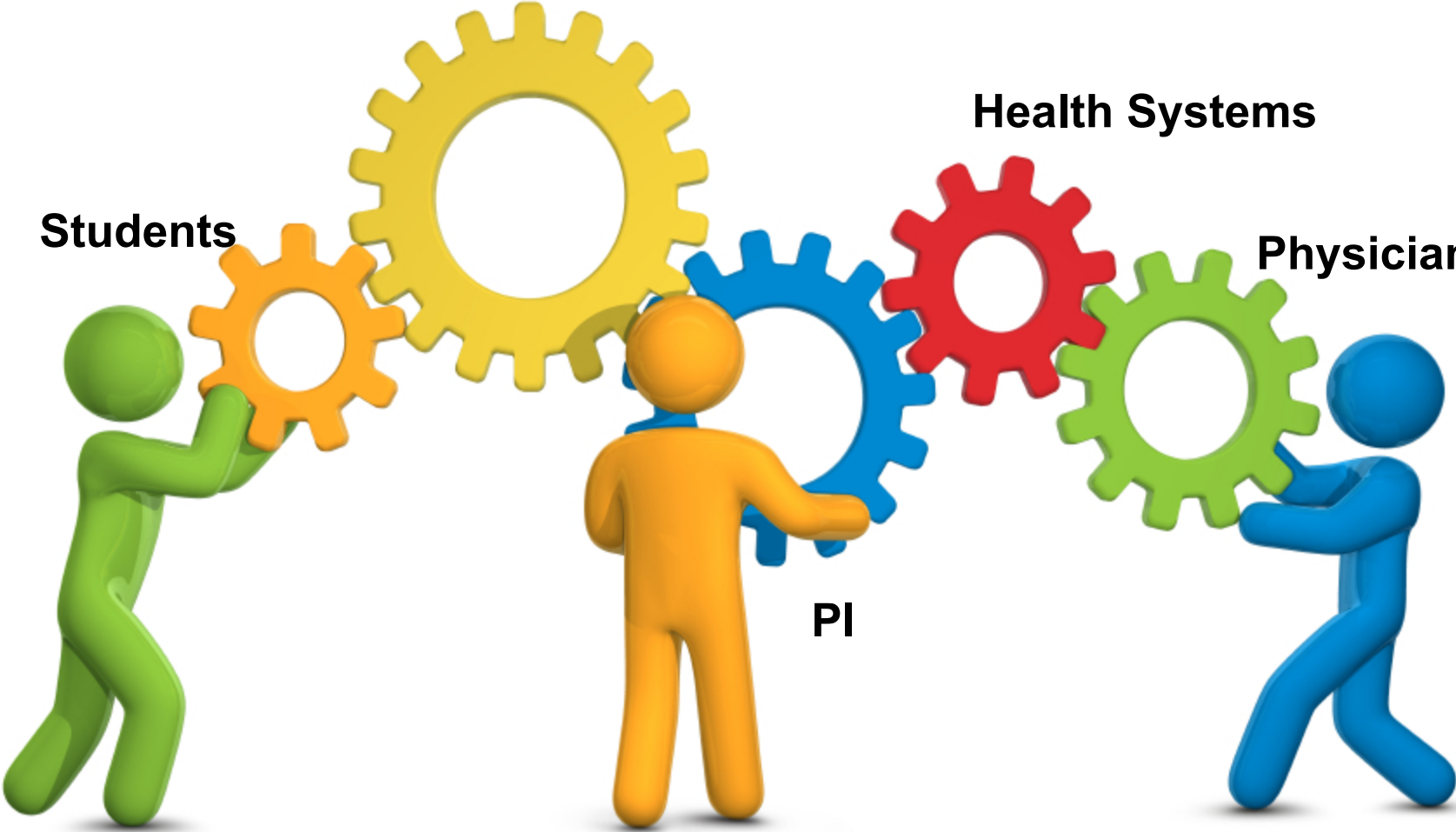


Communities

Health Systems

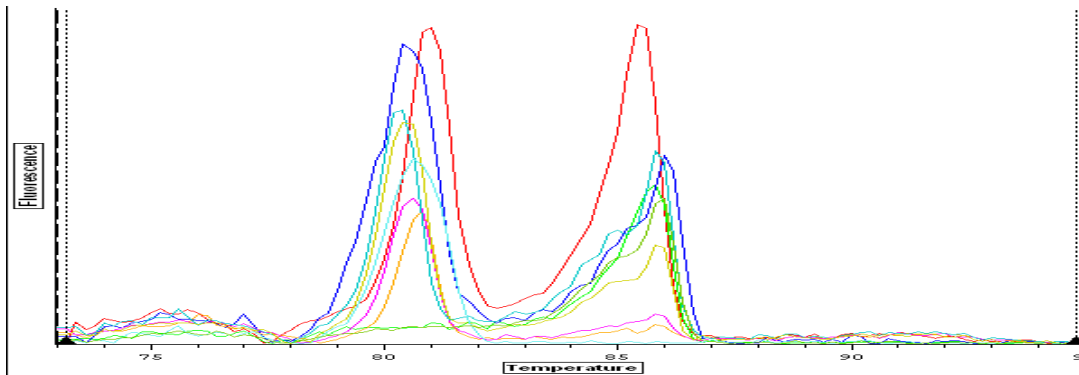
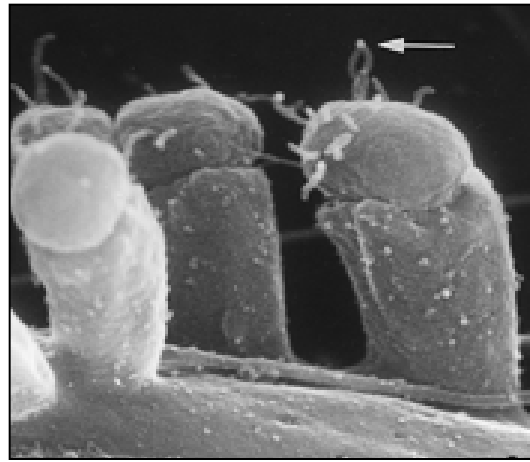
Students

Physicians



PI

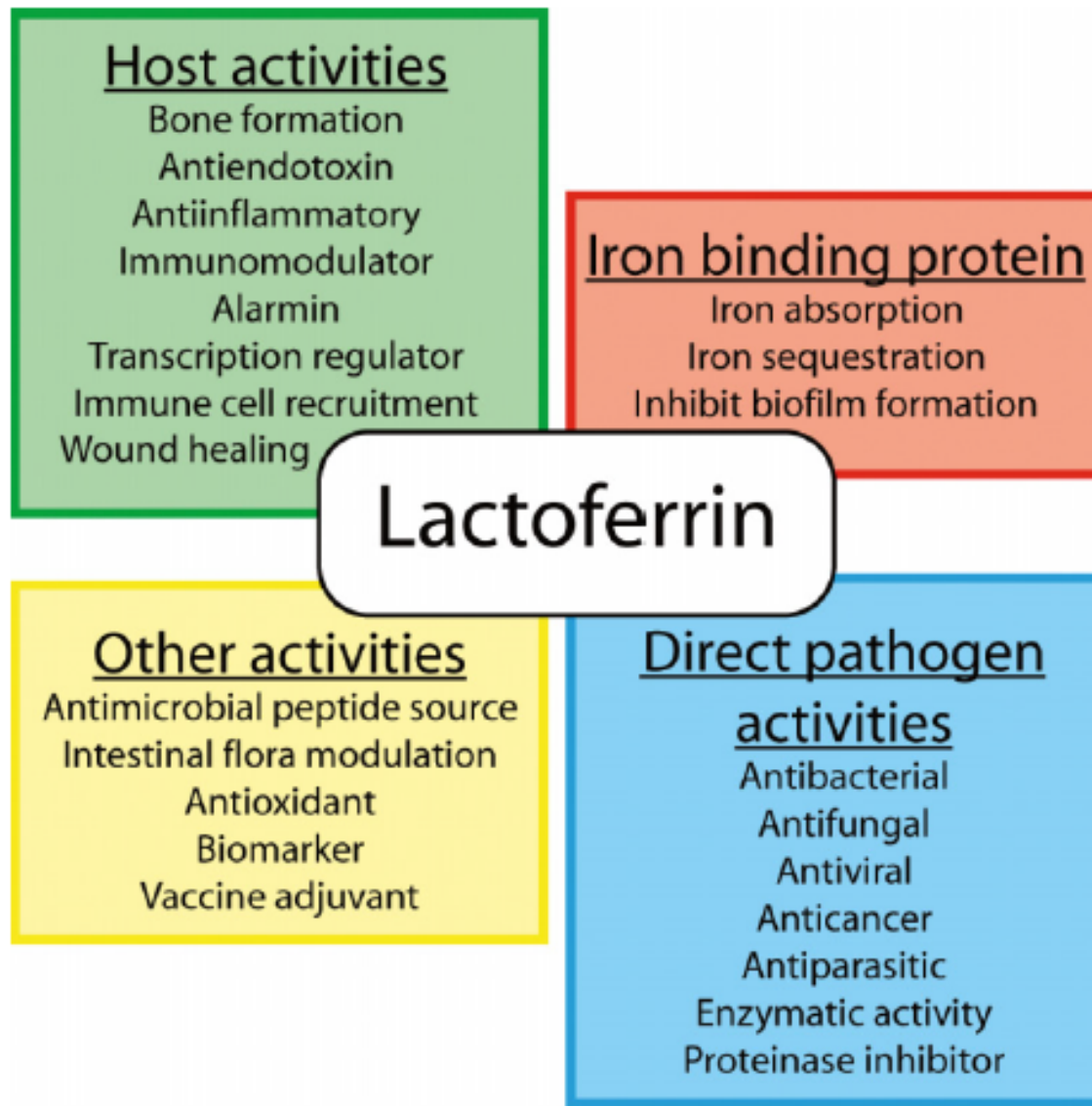
Expertise

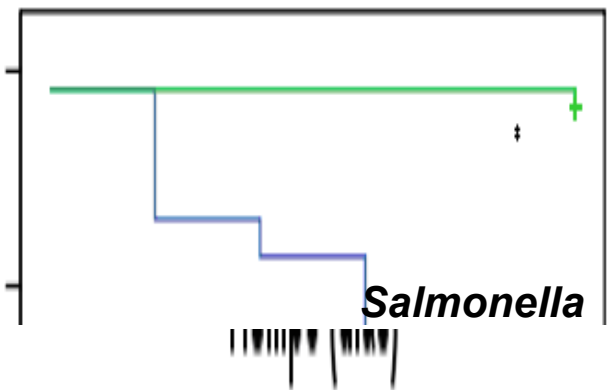
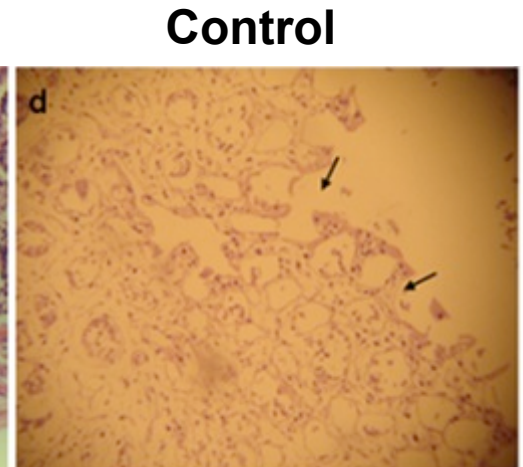
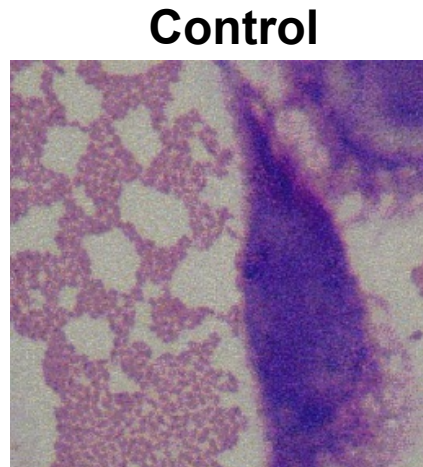
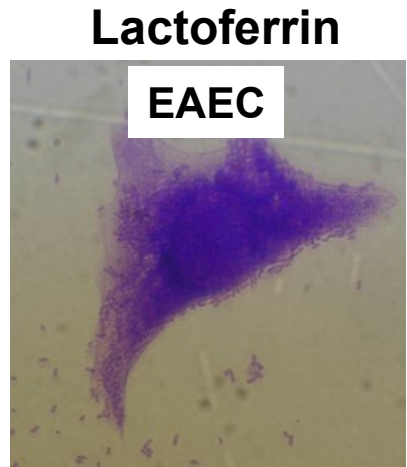
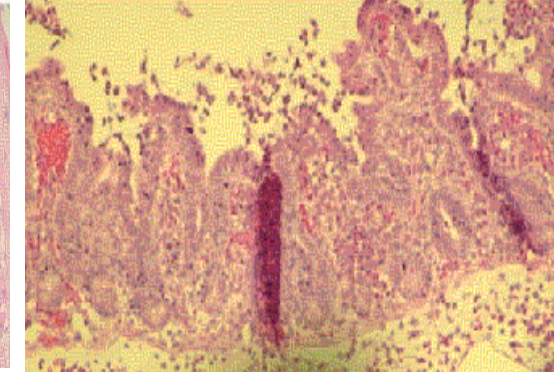
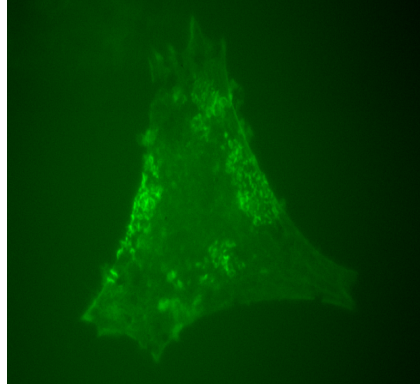
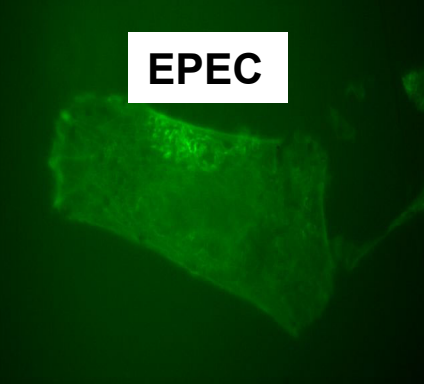


Furazolidona	53.0
TMP/SMX	43.7
Eritromicina	6.1
Ciprofloxacina	4.1
otro	2.5
Ampicilina	1.5
Azitromicina	1.0

Expertise









Community health workers performed twice daily home visits to give the intervention



Protocolo

Financiamiento

Contrato:
asesoría legal

**Aprobación
de la DISA**



**Aprobación
Comité Ética**

DIGEMID

Aprobación INS

Eventos
adversos

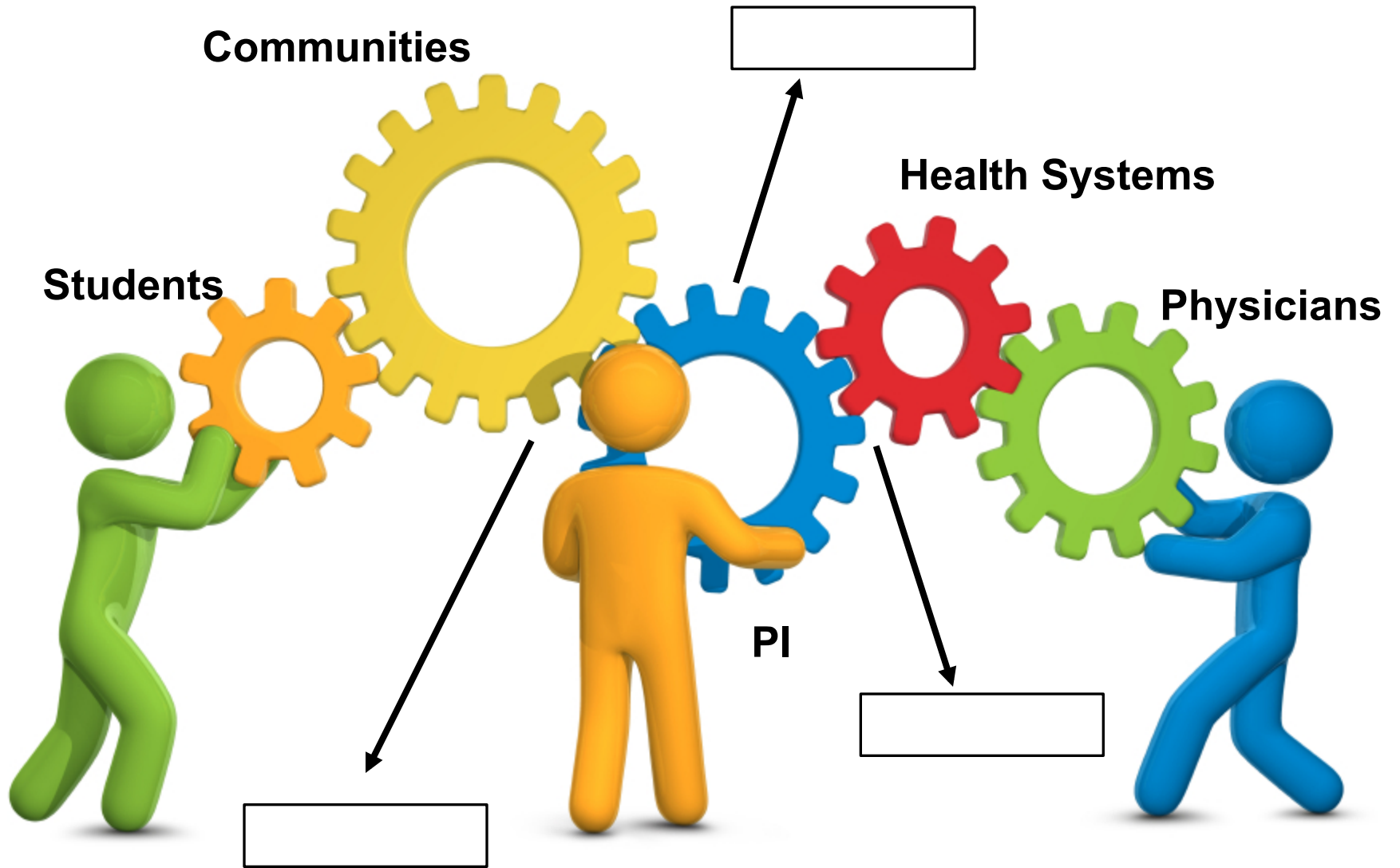
**Enrolamiento
pacientes**

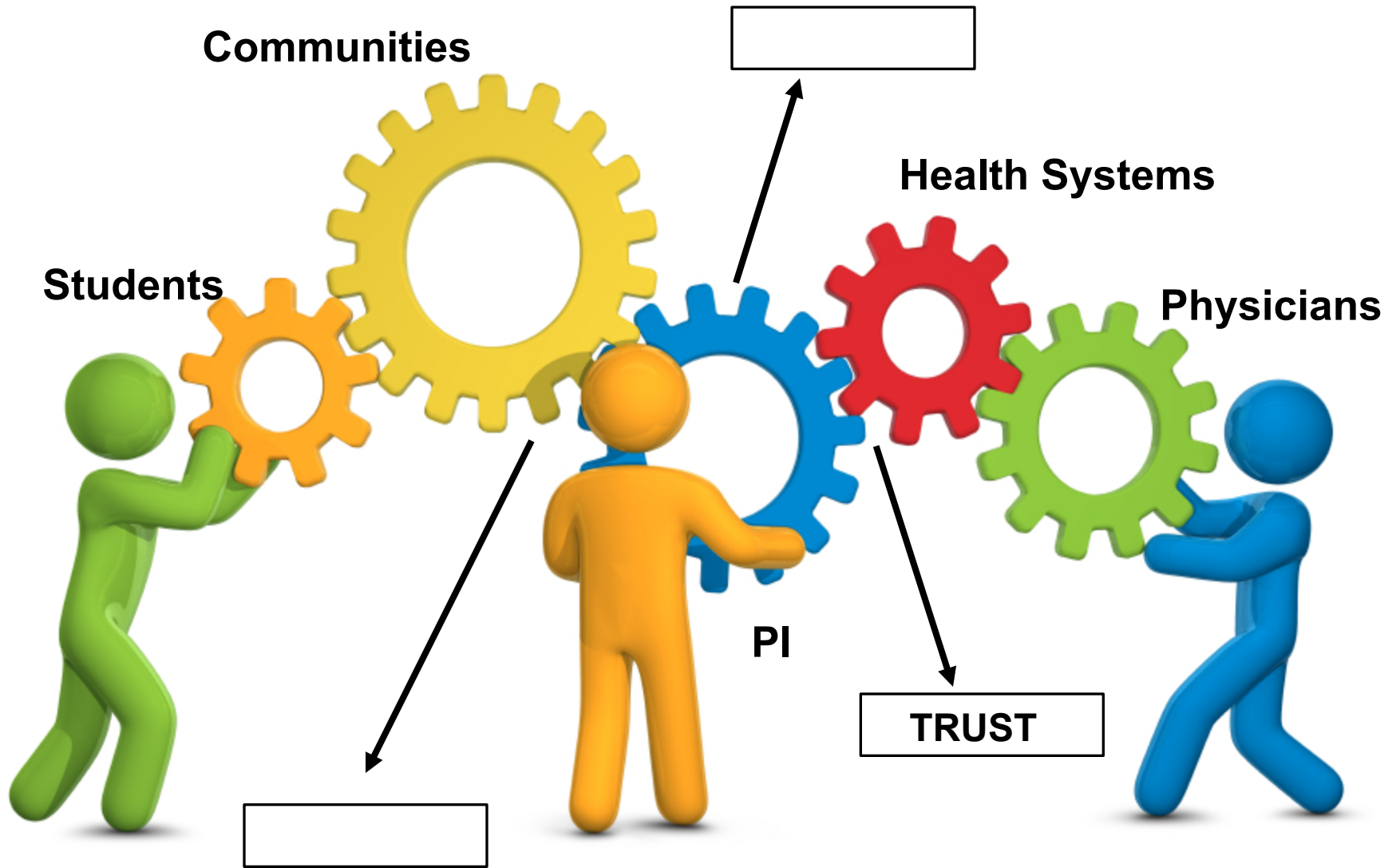
**Reclutamiento
Personal**

DSMB

**Consentimiento
o informado**

**Seguimiento
de pacientes**

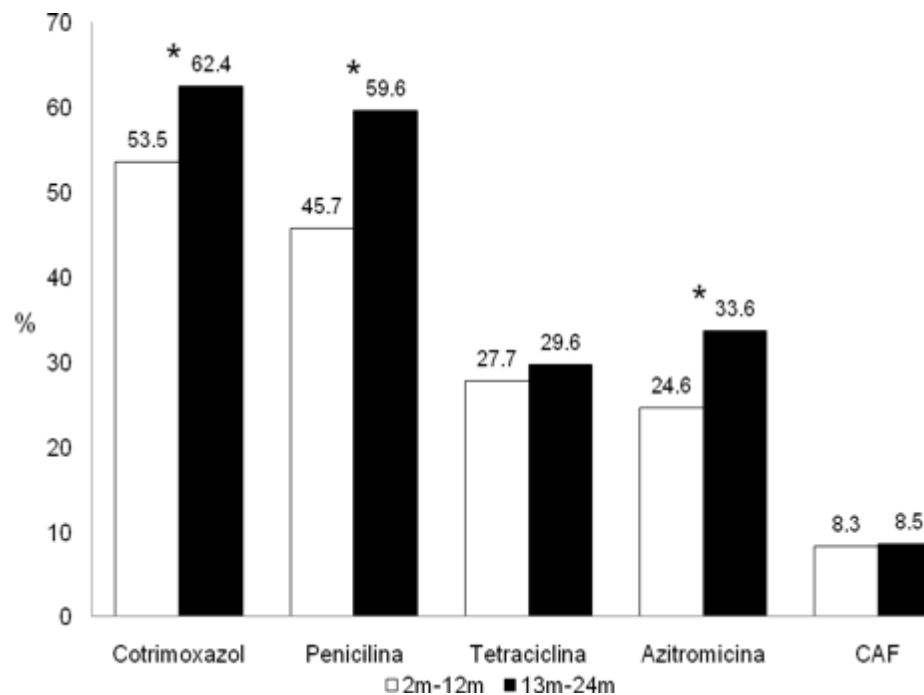




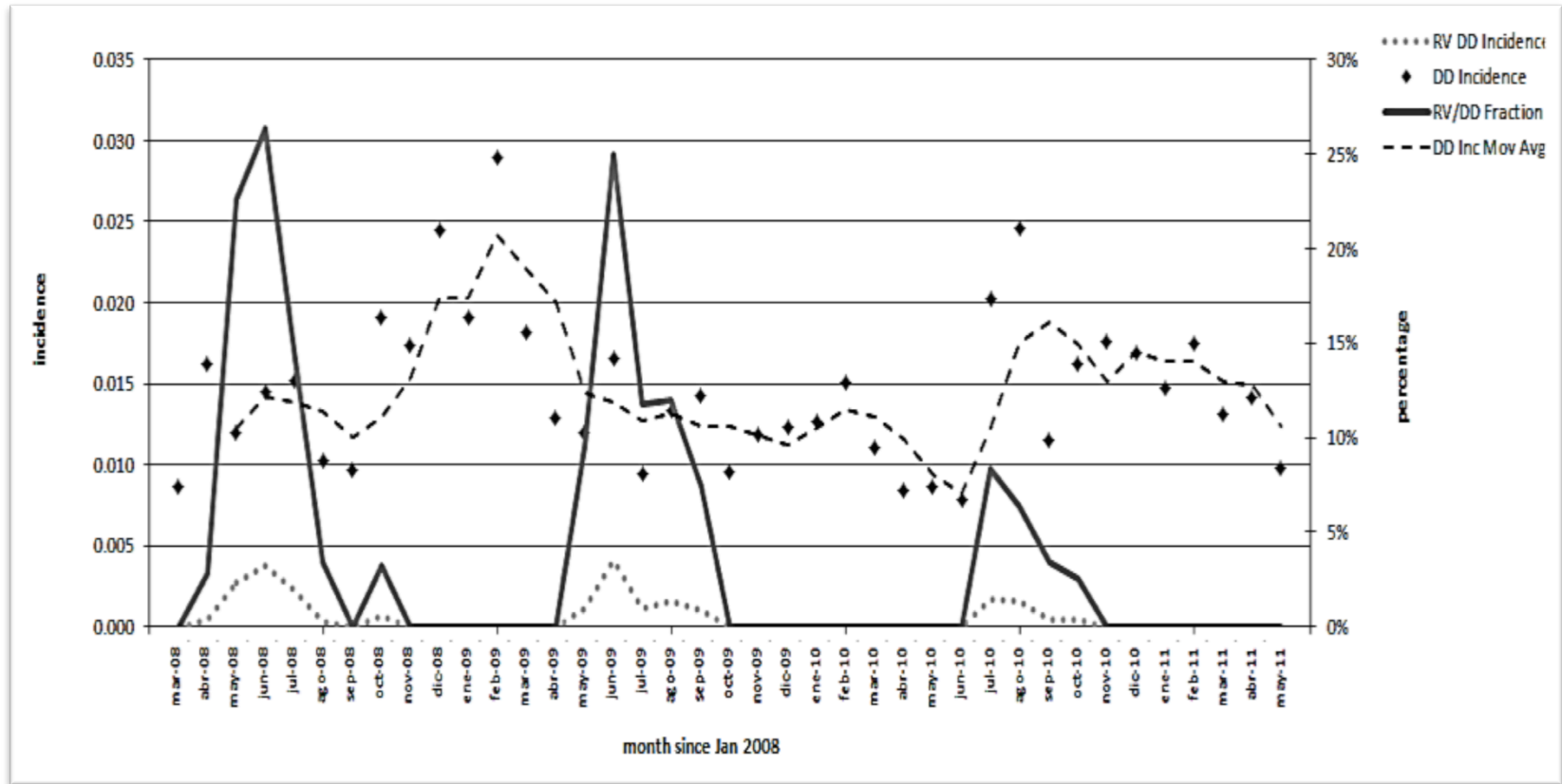


www.gruponeumococo.com.pe

PNEUMOCOCCAL SEROTYPES IN CARRIER CHILDREN PRIOR TO THE INTRODUCTION OF ANTI-PNEUMOCOCCAL VACCINES IN PERU



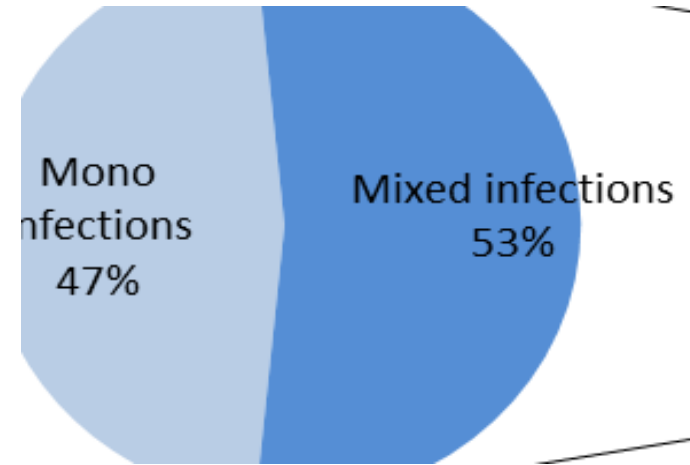
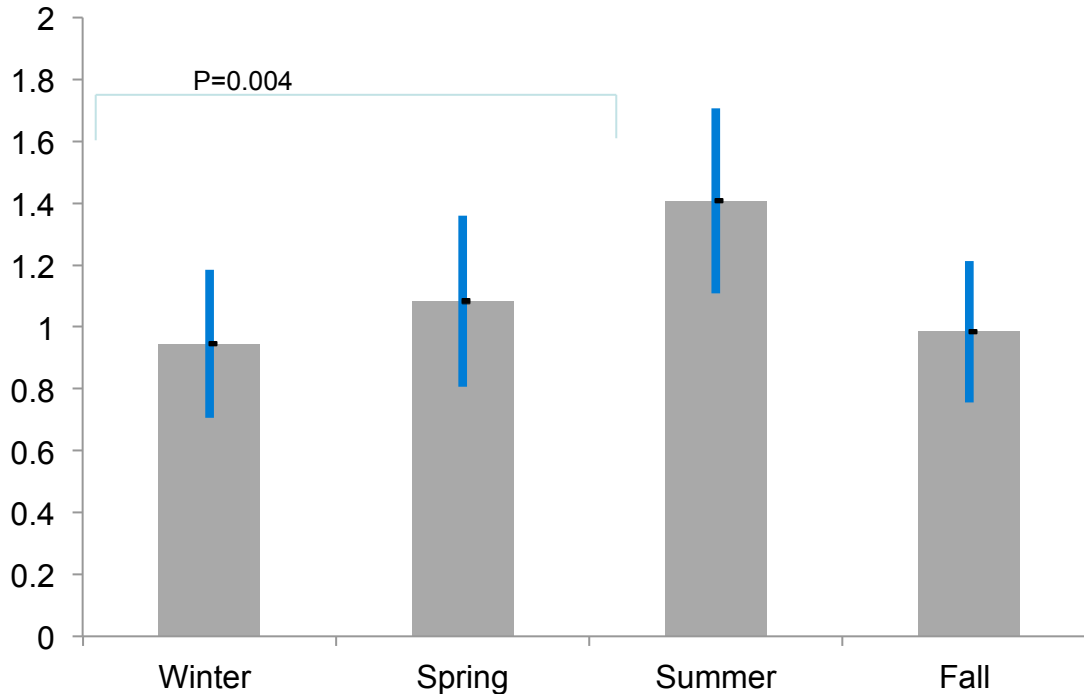
Rotavirus prevalence in children 12-24m in peri-urban communities in Lima (2008-2011)



- Total number of diarrhea samples analyzed: 1,471
- Rotavirus prevalence: 4.9%
- Seasonality: peak in winter (May-June- July)
- Rotavirus vaccine introduced in 2008 in the National Immunization Program

Norovirus –associated diarrhea among young Peruvian children

Incidence of Norovirus by season



- Norovirus + Rotavirus or Adenovirus
- Norovirus + parasite
- Norovirus + bacteria
- Any other combination

- Cohort study of 555 children 12-24m
- Norovirus prevalence: 35%

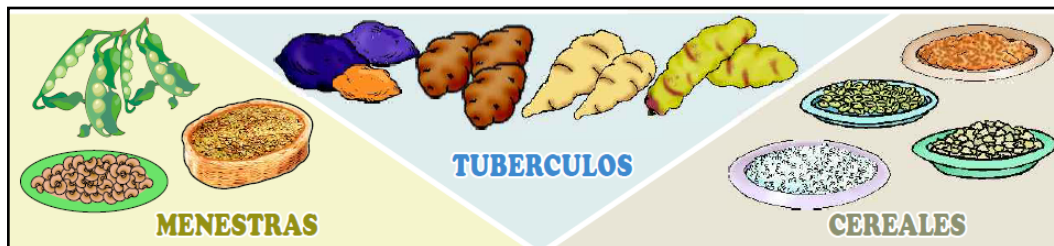
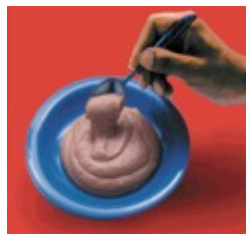
MANUAL EDUCATIVO PARA PADRES DE FAMILIA Y PERSONAL DE LOS CENTROS EDUCATIVOS

“Evaluación de la seguridad y eficacia de una proteína purificada de pescado (FPi) en la nutrición de niños menores de 36 meses”

PROMOVIENDO UNA ADECUADA NUTRICIÓN Y ALIMENTACIÓN DE NUESTROS HIJOS

CONTENIDO

- Anemia por deficiencia de hierro.
- Alimentación balanceada.
- Alimentación complementaria en niños menores de 03 años.
- Loncheras escolares nutritivas y saludables.
- Buenas prácticas de higiene y manipulación de alimentos para la prevención de diarreas.



Flujograma de procesos

PRIMER PASO

Cálculo de ingredientes según N° raciones a preparar

Peso de cada ingrediente según dosificación

Cálculo de la proteína (PPP) según N° de raciones a preparar



Segundo paso

Preparación de los alimentos



Tercer paso

Mezclar la cantidad de PPP a la preparación

En menestras: se agrega a guisos.

En tallarines se agrega a la salsa

Generalmente se agrega a los purés

La mezcla se hace mediante movimientos envolventes para uniformizar la preparación.

No se mezcla cuando la preparación todavía continúe en cocción.



servir



Randomized Double-Blind Controlled Trial of Bovine Lactoferrin for Prevention of Diarrhea in Children

Theresa J. Ochoa, MD^{1,2,3}, Elsa Chea-Woo, MD², Nelly Baiocchi, MD², Iris Pecho, MPH⁴, Miguel Campos, MD, PhD⁵, Ana Prada, MSc¹, Gladys Valdiviezo, RN¹, Angela Lluque, MSc¹, Dejian Lai, PhD⁶, and Thomas G. Cleary, MD³

Table III. Comparison of diarrhea outcomes between the bLF and placebo groups

	bLF (95% CI)	Placebo (95% CI)	Type*	Comparison (95% CI)	P value
Incidence, episodes/child/y	5.43 (5.02-5.86)	5.15 (4.74-5.59)	R	1.05 (0.94-1.18)	.375
Duration, d	4.76 (4.41-5.15)	5.34 (4.93-5.80)	I	0.89 (0.80-0.99)	.046
Average prevalence, % of d with diarrhea	6.6 (6.4-6.8)	7.0 (6.8-7.2)	P	-0.4 (-0.7 to -0.1)	.017
Episodes with moderate or severe dehydration, %	1.0 (0.4-2.1)	2.6 (1.5-4.3)	P	-1.6 (-3.3 to -0)	.045
Episodes with severe diarrhea, %	32.2 (28.6-36.0)	34.0 (30.1-37.9)	P	-1.8 (-7.2 to 3.7)	.545
Episode severity score (MRV), mean	4.89 (4.67-5.11)	5.05 (4.83-5.28)	M	-0.16 (-0.48 to 0.16)	.625
Bloody diarrhea, d with blood/child/y	0.28 (0.19-0.38)	0.30 (0.21-0.42)	U	0.91 (0.56-1.49)	.787
Total loose stools, loose stools /child/y	95.0 (91.3-95.0)	98.6 (95.0-98.6)	U	0.95 (0.93-0.98)	<.001

*R, estimation by incidence rate, comparison by bLF/placebo (PL) rate ratio, P value from Poisson test; I, estimation by duration as inverse of recovery rate, comparison by bLF/PL rate ratio, P value from Poisson test; P, estimation by binomial proportion, comparison by bLF-PL difference of proportions, P value from Fisher test; M, estimation by arithmetic mean, comparison by bLF-PL difference of means, P value unequal Student test; U, estimation by rate, comparison by bLF/PL rate ratio, P value from Poisson test.



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PROYECTO DE RESPONSABILIDAD SOCIAL

Videos en
Salud

Cusco

“La lactancia materna,
el mejor comienzo”
“Cuidados del Recién Nacido”



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Videos en
Salud

Diarrea y Nutrición
Selva



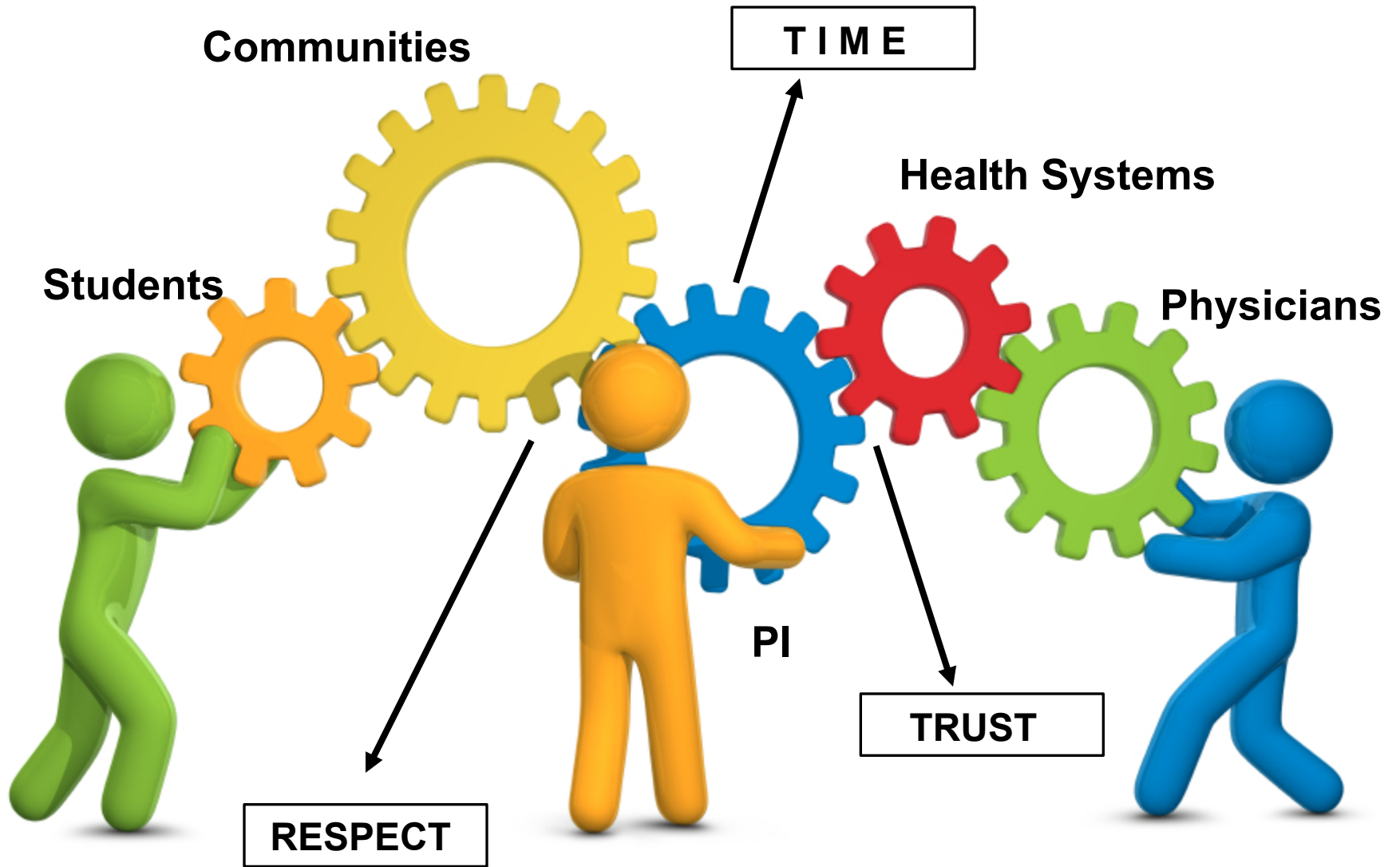
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PROYECTO DE RESPONSABILIDAD SOCIAL

Videos en
Salud

Diarrea y Nutrición
Sierra

**VIDEOS EN
SALUD**







Lactantes de 6 a 12 meses



Niños de 12 a 24 meses



Niños de 24 a 36 meses



“El Comedor” Centro de Salud Ermitaño Alto, Independencia

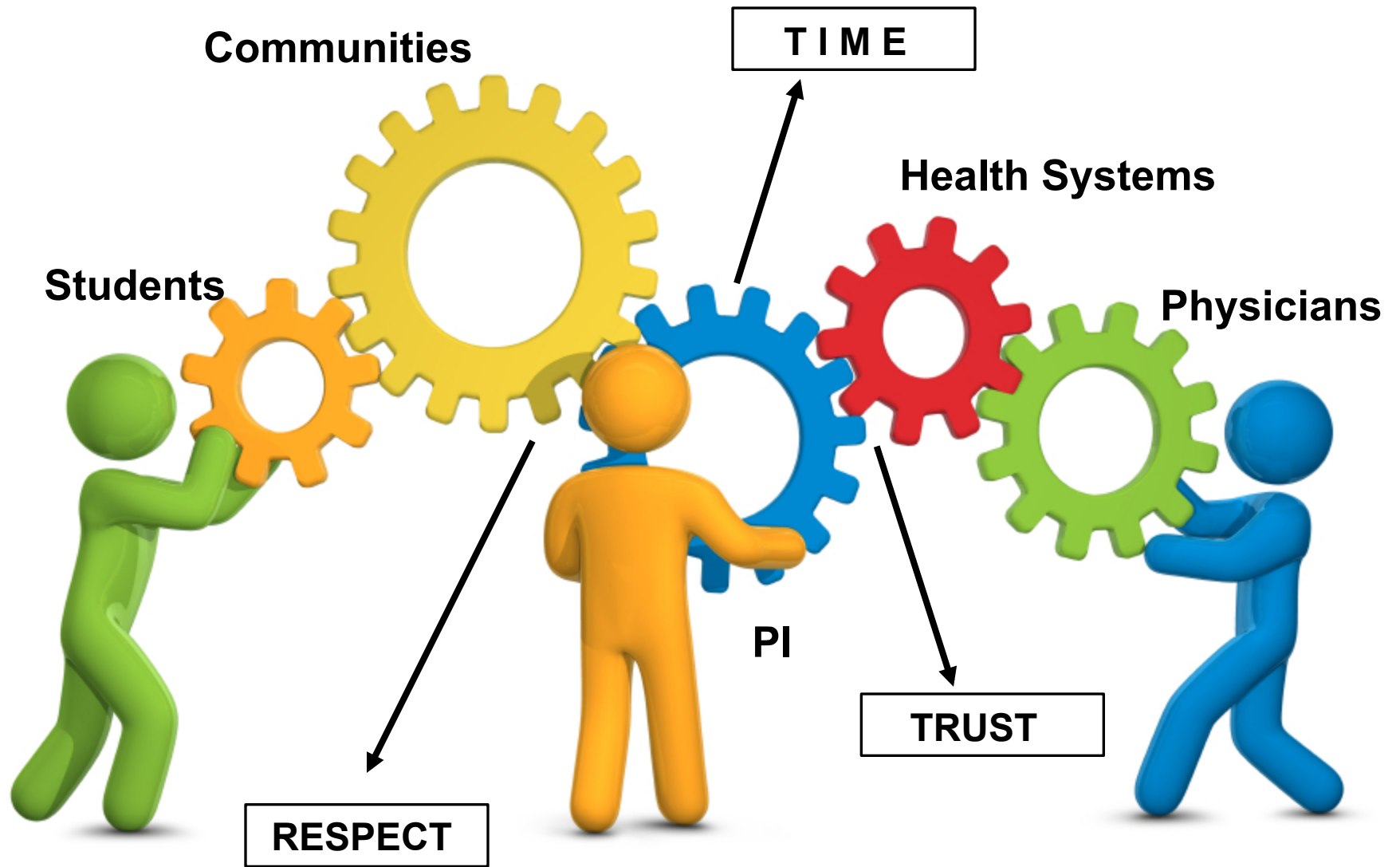


“El Comedor” ♪ Ermitaño Alto 2009-2012



“El Comedor” ♪ Ermitaño Alto 2013-2014





Global Health Partnership

