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**CURRICULUM VITAE****Fabián E. Sáenz**

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**POSITION TITLE**

Associate professor, Center for Research on Health in Latin America, Pontificia Universidad Católica del Ecuador

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**EDUCATION & TRAINING:**

<b>START MONTH/ YEAR</b>	<b>END MONTH/ YEAR</b>	<b>DEGREE (if applicable)</b>	<b>INSTITUTION AND LOCATION</b>	<b>TRAINING MENTOR</b>	<b>SCIENTIFIC DISCIPLINE</b>
5/2013	6/2013		Centers for Disease Control and Prevention	Venkatachalam Udhayakumar Ph.D.	Molecular methods to study malaria parasites
8/2008	2/2011	Postdoc	University of South Florida	Dennis Kyle Ph.D.	Drug discovery
8/2002	5/2008	PhD.	University of Notre Dame	John Adams Ph.D	Molecular parasitology
8/1995	2/2001	B.Sc.	Pontificia Universidad Católica del Ecuador	Eugenia del Pino Ph.D	Developmental biology

**PROFESSIONAL POSITIONS:**

<b>START MONTH/ YEAR</b>	<b>END MONTH/ YEAR</b>	<b>POSITION TITLE</b>	<b>DEPARTMENT</b>	<b>INSTITUTION AND LOCATION</b>
1/2013	Present	Associate professor. Malaria research	Biology	Pontificia Universidad Católica del Ecuador, Quito, Ecuador
3/2011	12/2012	Assistant profesor. Malaria research	Biology	Pontificia Universidad Católica del Ecuador, Quito, Ecuador
10/2001	07/2002	Health and Environment supervisor: OEPC pipeline project, Ecuadorian Amazon	Health, safety and environment	Joint Venture, Conduto, Harbert, Santos CMI, Ecuador
2/2001	07/2001	Research assistant. Cell and Developmental biology	Biology	Pontificia Universidad Católica del Ecuador, Quito, Ecuador

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## Research interests:

- Molecular biology techniques to support malaria elimination in Ecuador
- *Plasmodium* antimalarial resistance in Ecuador
- *Plasmodium* molecular epidemiology in Ecuador

## Honors:

- Elected young scientist affiliated member, The World Academy of Sciences for the advancement of sciences in the developing world (TWAS), 2012-2016.
- Graduated with the highest GPA of PUCE, first semester 2000-2001

## Awards:

Travel award to attend the Molecular Approaches to Malaria meeting, Lorne, Australia (2016).

Bill and Melinda Gates Foundation Global Health Travel Award to attend the Keystone Symposium in Drug Discovery for Protozoan Parasites, Santa Fe, NM

Fulbright Scholarship to pursue studies at University of Notre Dame, IN, USA

Kellogg Institute for International Studies Graduate Fellowship Award for Graduate Studies at the University of Notre Dame

## Peer-Reviewed Publications

-**Sáenz FE.**, Morton L., Akinyi-Okoth S., Valenzuela G., Velez E., Castro LE., Udhayakumar V. Clonal expansion of *Plasmodium falciparum* in the Northwest coast of Ecuador. *Malaria Journal*, Dec 10; 13, 2015.

- **Sáenz FE**, Arévalo A, Valenzuela G, Vallejo A, Castellanos A, Poveda A, Gutierrez J, Alvarez A, Yang HY, Benavides Y, Castro LE, Arévalo-Herrera M, Herrera S. Malaria epidemiology in low endemicity areas of the northern coast of Ecuador. Submitted to: *Plos Neglected Tropical Diseases*.

-Henrich PP, O'Brien C, **Sáenz FE**, Cremers S, Kyle DE, Fidock DA. Evidence for pyronaridine as a highly effective partner drug for treatment of artemisinin-resistant malaria in a rodent model. *Antimicrob Agents Chemother*. 2014 Jan;58(1):183-95.

- **Saenz FE.**, Mutka T., Oduola A., Kyle DE. 4-aminoquinoline analogues highly active against the blood stages of *Plasmodium* *in vivo* and *in vitro*. *Antimicrobial Agents and Chemotherapy*. 56(9):4685-92. 2012.

-Cross, R., Flanigan, D., Monastyrskyi, A., LaCrue, A., **Saenz, F.**, Maignan, J., Mutka, T., White, K., Shackelford, D., Bathurst, I., Fronczek, F., Wojtas, L., Guida, W., Charman, S., Burrows, J., Kyle, D., Manetsch, R. Orally Bioavailable 6-Chloro-7-methoxy-4 (1H)-quinolones Efficacious against Multiple Stages of *Plasmodium*. *Journal of Medicinal Chemistry*. Manuscript ID: jm-2014-00942v. In press.

-**Sáenz FE**, Lacrue AN, Cross RM, Maignan JR, Udenze K, Manetsch R, Kyle DE. 4-(1H)-Quinolones and 1,2,3,4-tetrahydroacridin-9(10H)-ones prevent the transmission of *Plasmodium falciparum* to *Anopheles freeborni*. *Antimicrob Agents Chemother*. 2013.

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-Nilsen A., LaCrue A., White KL., Forquer IP Cross RM., Marfurt J., Mather M., Delves MJ., Shackleford DM., **Saenz FE.**, Morrisey JM., Steuten J., Mutka T., Li Y., Wirjanata G., Ryan E., Duffy S., Kelly JS., Sebayang BF., Zeeman AM., Noviyanti R., Sinden RE., Kocken CHM., Price RM., Avery VM., Barturen IA., Jiménez-Díaz MB., Ferrer S., Herreros E., Sanz LM., Gamo Benito FJ., Bathurst I., Siegl P., Guy RK., Burrows J., Winter RW., Vaidya AB., Charman SA., Kyle DE., Manetsch R., Riscoe MK. Quinolone-3-Diarylethers: A New Class of Antimalarial drug. *Science Transl Med* Vol. 5, Issue 177, 2013.

-**Lacrué AN., Saenz FE.**, Cross M., Maignan J., Monastyrski A., Manetsch R., Kyle DE., 4(1H)-Quinolones with liver stage activity against *Plasmodium berghei*. *Antimicrobial Agents and Chemotherapy*. 57(1):417-24. 2013.

-**Saenz FE.** Functional analysis of *Plasmodium falciparum* MAEBL (2008). Thesis (Ph. D.) University of Notre Dame, Notre Dame, IN, 2008

-**Saenz FE.** Balu B., Smith J., Mendonca SR., Adams JH. A transmembrane form of the *Plasmodium falciparum* MAEBL is essential for the invasion of *Anopheles* salivary glands. *PLoS ONE*. 2008 May 28;3(5):e2287.

-**Fu J, Saenz FE,** Reed MB, Balu B, Singh N, Blair PL, Cowman AF, Adams JH. Targeted disruption of *maeb1* in *Plasmodium falciparum*. *Mol. Biochem. Parasitol.* 2005 May;141(1):113-7.

-**Sáenz FE.**, del Pino EM. Modo del desarrollo en el pez vivíparo *Priapichthys panamensis* (Poeciliidae). *Revista de la Pontificia Universidad Católica del Ecuador*.71: 15-25. (2003).

- del Pino EM., Pérez, OD., **Sáenz, FE.**, Brown, F. D., Ávila, ME., Barragán, VA. Los polipéptidos asociados a la lámina nuclear 2 (LAP2) en peces y anfibios. *Revista de la Pontificia Universidad Católica del Ecuador*.71: 27-35 (2003).

- del-Pino EM, **Sáenz FE**, Pérez OD, Brown FD, Avila ME, Barragan VA, Haddad N, Paulin-Levasseur M, Krohne G. Lamina-associated polypeptide 2 (LAP2) expression in fish and amphibians. *Int J Dev Biol*. 2002 Mar;46(2):227-34.

- **Sáenz, F.** 2001. Desarrollo y proteínas asociadas a la lámina 2 (LAP2) en *Priapichthys panamensis* en comparación con otros peces ecuatorianos. Tesis. Pontificia Universidad Católica del Ecuador, Quito.

- Paz y Miño, C., Del Pozo, M., Perez C., Avila, ME., Dávalos, V., Paladines, R., **Sáenz, F.**, Burgos, R., Leone, P. 1998. Aplicaciones del estudio de ARN en genética humana. *Revista PUCE*. N°63, 103-118.

#### **Publications of Science Dissemination :**

**Sáenz FE,** Vera CA. Infecciones asintomáticas ¿la regla o la excepción? *Revista Nuestra Ciencia*. Número 18. Facultad de Ciencias Exactas y Naturales. Pontificia Universidad Católica del Ecuador. ISSN: 1390-1893. May, 2016.

**Sáenz FE.** Los parásitos nos controlan. *Revista Nuestra Ciencia*. Número 16. Facultad de Ciencias Exactas y Naturales. Pontificia Universidad Católica del Ecuador. ISSN: 1390-1893. April, 2014.

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**Sáenz FE.**, Ocaña S. La malaria y el nuevo grupo del CIEI. Revista Nuestra Ciencia. Número 15. Facultad de Ciencias Exactas y Naturales. Pontificia Universidad Católica del Ecuador. ISSN: 1390-1893. April, 2013.

**Sáenz FE.**, Ávila ME. Malaria: una enfermedad que ha dominado la humanidad desde sus orígenes. Revista Nuestra Ciencia. Número 14. Facultad de Ciencias Exactas y Naturales. Pontificia Universidad Católica del Ecuador. ISSN: 1390-1893. April, 2012.

Active Grants:

**Awarded:**

*Plasmodium vivax* alternative invasion pathways in the Pacific Coast of South America. TWAS. Award period: 2/2017-8/2018

**Active:**

Molecular epidemiology studies of *Plasmodium* in Ecuador. PI: Fabian Saenz, Funded by: PUCE. Award period: 07/2016-11/2017

Latin American Center for Malaria Research and Control (CLAIM). NIH U19AI089702. PI: Socrates Herrera. Funded by: United States National Institutes of Health. Award Period: 2014-2017

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