# Juanita Lara

Wyss Institute for Biologically Inspired Engineering Harvard University Center for Life Sciences Boston 3 Blackfan Circle, Room 530 Boston, MA 02215

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### Education

Universidad de Los Andes, Bogotá, Colombia

B.Sc. in Biology, December 2013

Universidad de Los Andes, Bogotá, Colombia

B.Sc. in Physics, December 2013

Australian National University, Canberra, Australia

Exchange student, July-November 2010

Courses: Molecular Immunology, Systems neuroscience, Parasitology and Advanced Genetics and Bioinformatics

Abraham Lincoln School, Bogotá, Colombia High School Diploma, June 2007 Graduated with Honors

# Research Experience

### Wyss Institute for Biologically Inspired Engineering

Agusust 2014 - present

Research assistant

Peng Yin Laboratory

Super-resolution imaging via programmable autonomous blinking.

#### Universidad de Los Andes

January - July 2014

Researcher at the Biophysics Group

Studies on changes in lipid chain order at low temperatures in *Bacillus subtilis* by means of fluorescence techniques in vivo.

### Universidad de Los Andes

February - November 2013

Undergraduate thesis project

Advisors: Professor Chad Leidy, Ph.D. and Professor Adriana Bernal, Ph.D.

Modulation of the thermodynamic behavior in the membrane of *Bacillus subtilis* by the activity of the enzyme Desaturase  $\Delta - 5$  des.

### Universidad de Los Andes

July - November 2012

iGEM Team Colombia

Advisors: Professor Juan Manuel Pedraza, Ph.D., Professor Adriana Bernal, Ph.D. and Professor Silvia Restrepo, Ph.D.

Construction of a genetically modified bacteria "detect and alert" system as a defense aid for crop plantations against plant pathogens.

# Work Experience

Universidad de Los Andes, Bogotá, Colombia.

Department of Mathematics

• Teacher Assistant of Differential Calculus

August to November 2009

Department of Physics

• Member of the Biophysics Research Group

February 2012 to present

• Instructor of Physics I Tutorial Class.

August to November 2013

- Tutor at the Clinic for problem-solving (Physics learning center that offers help and instruction to undergraduate students with physics courses). August to November 2013
- Organizer of the 6th School on Mathematical Physics: Spectral analysis for random matrices and its applications (to be held in May 2014). January 2014-present

## Schools

Universidad de Los Andes, Bogotá, Colombia.

6th School on Mathematical Physics: Spectral analysis for random matrices and its applications. May 26-30, 2014.

Universidad de Los Andes, Villa de Leyva, Colombia.

Geometric, Algebraic and Topological Methods for Quantum Field Theory

July 15-27, 2013.

Name of the talk given: "Bell's inequalities from Jayne's approach to probability"

Universidad de Los Andes, Bogotá, Colombia.

5th School on Mathematical Physics: The Mathematics of Entanglement.

May 27-31, 2013.

### Awards

2012 - Member of the group that was awarded the Gold Medal at the iGEM Latin-American Jamboree. 2007 - Andrés Bello Award in Physics.

7th best average score in the Colombian Standardized test required for admission to every Colombian university (ICFES).

## Other Skills

LanguagesSpanish (First Language) English (Fluent)

Programming Languages Python

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## References

Chad Leidy Ph.D.
P.I. Biophysics Research Group
Associate Professor
Vice-Dean of the Science Faculty
Department of Physics
Universidad de Los Andes
E-mail: cleidy@uniandes.edu.co

Adriana Bernal Ph.D.
P.I. Laboratory of Mycology and Plant Pathology (LAMFU)
Assistant Professor
Department of Biological Sciences
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