

# Juan Sebastian Hernandez Cifuentes

## B.S. Chemistry

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🏠 San José, Costa Rica



## Objective

Passionate scientist for solve real problems with leadership, creativity and innovation. Interested in biochemistry, biotechnology and biomedicine. Confident that Science is the motor for improve the quality of life and efficiency of processes applied in actual challenges.



## Experience



### Centro de Investigación en Enfermedades Tropicales (February 2018- Currently)

Master Student in Biochemistry and Science Materials

**Work Description:** Master student in a project to Develop a Biosensor for *Clostridium difficile* spores, based on Graphene Oxide functionalized with aptamers for biomedical applications.

**Key Skills:** Clean Room Protocols for Biomedical Devices. Western Blot for Coated Proteins of *C. difficile*. Extraction and Purification Proteins. CVD-Graphene transference. Plasma oxidation. Aptamer Analysis and link to Oxide Graphene surface. Raman Spectroscopy. NMR Analysis.



### Recyclable Innovations Lab (March 2017- Dec. 2018)

Chief Operating Officer- **Founder**

**Work Description:** Scientific, Technical and Industrial Development for projects about Biodegradable Polymers and other biomaterials with high aggregated value for diverser industries.

**Key Skills:** Formulation and Industrial scalation of Biodegradable Biopolymers. Use of Industrial Single Screw Extrusion Machines. Entrepreneurship. Project Management. Chemistry of Materials and Industrial Processes. Innovation and Intelectual Property Management. Soft Skills for Business and Leadership.



### Centro Nacional de Innovación Biotecnológica (CENIBiot) (March 2017- July 2017)

Intership Genomic Laboratory

**Work Description:** Intership in a project for Genetic Sequenciation of Costa Rica's Wild Cats for found correlations between the specie and their microbiota in a variable natural samples.

**Key Skills:** Develop of genetic and molecular methods for sequen- cing DNA. PCR. Data Analysis. Interdisciplinary work.



### Centro de Investigación en Contaminación Ambiental (July 2015- December 2016)

Research Assistant in Air Quality Laboratory

**Work Description:** Research Assitant in a project "Mitigation of Agricultural Green House Gases". Support in Analytical Area and Data Analysis.

**Key Skills:** Quantification of Green House Gases by Gas Cromato- graphy and CRDS. Liquid Chemistry for Analysis of Soil Ammonium. Formulation and use of Denitrification Inhibitors for productives soils. Manage Quality Requirements by ISO 17025.



### Escuela de Química de la Universidad de Costa Rica (July 2016- December 2016)

Education Assistant

**Work Description:** Collaboration in Learning Process in an Undergraduate Course of General Chemistry and Associate Labo- ratory.

**Key Skills:** Support in Laboratory Practices for Undergraduate Students in Cualitative Analysis of Cations and Anions. Teaching Basic Concepts of Chemical Equilibrium and Thermodynamics.



## Education



### Master Degree (2019-Currently)

Universidad de Costa Rica, San José, Costa Rica.



### Chemistry Major (2013-2018)

Universidad de Costa Rica, San José, Costa Rica.



## Otras actividades



### Speaker in TEDx Costa Rica

**Description:** Speaking about how to generate disruptive thinking and leadership through authenticity.



### Young Latin American Leader in Biotechnology AllBiotech (2018)

**Description:** Representation of Costa Rica in the 2nd Latin Ameri- can Congress AllBiotech for Leaders in Biotechnology for improve visualization of Science in Latin America Region and help to trans- form our Society and Countries through Efective Scientific Commu- nication, Biotechnology and Entrepreneurship.



### American Chemical Society Student Chapter Costa Rica

Coodinator of Scientific Communication (2018)

**Description:** Scientific Communication and manage of activities about Chemistry for ACS Student Chapter Costa Rica.



### Innovation and Entrepreneurship Fair UCR

University of Costa Rica (2016)

**Description:** Coautor of Biodegradable Biopolymer with adequate physicochemicals properties by Film cast Method. First Place in the fair.



### International Biology Olimpiad (IBO)

Honorific Mention. Bali, Indonesia (2014)

**Description:** Costa Rica's Student Representation in the 25th International Biology Olimpiad. Competing with 250 best stud- ents of the World in Biology.



### Iberoamerican Biology Olimpiad (OIAB)

Silver Medal. Córdoba, Argentina (2013)

**Description:** Costa Rica's Student Representation in the 7th Iberoamerican Biology Olimpiad. Competing with 30 best stud- ents of the Iberoamerica in Biology.



## Languajes

INGLÉS (B1+)



SPANISH/ NATIVE