



MINGA HOUSE

Fundacion International Service Learning Colombia

Non-Profit Organization – Founded in 2014

NIT: 900867100-4

www.MingaHouse.org

What is MINGA?

“Minga entails a collaborative work system that dates back to the Incas. It refers to the commitment, contract or work agreement between two or more people. The word minga also stands for meeting or reunion.”

INTERNSHIP OPPORTUNITY

BIOINFORMATICS and COMPUTATIONAL BIOLOGY Intern Analyst



Learning Objectives:

BIOS is the leading center for bioinformatics and computational biology in Colombia. BIOS specializes in providing services to the Colombian government, the academic community, and the private sector to continue the development of scientific investigation and biotechnology industries.

BIOS has the mission to provide computational tools in relation to the life sciences; Developing software, storing and processing data supply disseminated by its researchers, by members of other research groups, or by third parties; Advance academic and educational activities, advise and guide intensive research in the use of data and its interpretation.

Intern Learning Objectives:

- Learn & implement computer systems such as Linux, ZYFCON
- Learn other basic programming in bioinformatic languages
- Learn to develop solutions and innovative services by using scientific and technological innovative tools
- Participate in developing investigation projects that deal with:
 - ✓ Genomics
 - ✓ Transcriptomics
 - ✓ Proteomics
 - ✓ Metagenomics
 - ✓ Metabolomics



Participant Requirements:

Educational Background: Undergraduate, Graduate & Professionals in any of the following fields: Biology, Electrical Engineering, Computer Science or any other related studies.

Spanish Language Skills: (None) 1 2 **3** 4 5 6 7 8 9 10 (Fluent) - Most BIOS staff speaks English

Potential projects and day-to-day duties:

- Write code and uses analytic tools to solve specific scientific problems related to the mission of BIOS.
- Identify and evaluate open source packages appropriate to a scientific project.
- Read scientific publications relevant to the project and summarizes key points.
- Participate in projects for economic growth based on scientific innovation that allows the creation of new products.
- Assist with the extraction, sequencing and analysis of genomic information of important agricultural, industrial and ecological species.
- Assist in the duties of molecular expedition, bio-prospecting, improvement and conservation and technology transfer.
- Assist in data mining, bibliographic revisions and revision of specific topics that are assigned.

Service Term:

- **Internship:** 3-12 months
- **Work Schedule:** 6-8 hrs./day - Mon-Fri (TBD am - TBD pm)
- **Service Window:** January – December

Special Skills Desired:

- Works well in a team atmosphere
- Basic knowledge of computer applications
- Knowledge of molecular biology concepts and computational genomics
- Demonstrates knowledge of scientific principles, procedures and techniques
- Familiar with graph algorithms, spatio-temporal and other forms of data analytics, management of data systems.



CENTRO DE BIOINFORMÁTICA
Y BIOLOGÍA COMPUTACIONAL
Conocimiento e innovación para el desarrollo