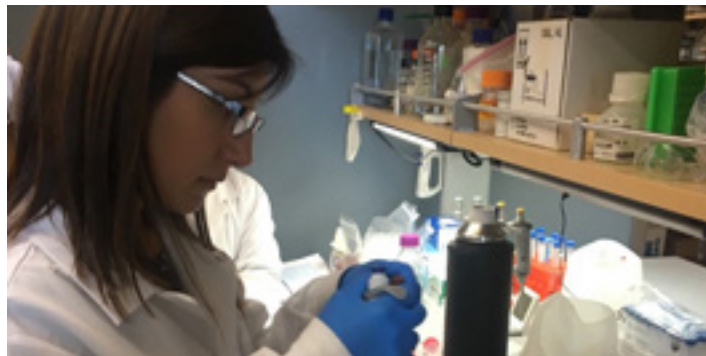


## Training Bioinformatics for DNA sequence Analysis and Genomics

I was part of the Research Program of Cereals and Native Grains of Agronomy Faculty at National Agrarian University La Molina. I received training in the College of Life Sciences at Brigham Young University, which was supervised by Dr. Jeff Maughan, Dr. David Jarvis, and Dr. Rick Jellen in the Department of Plant and Wildlife Sciences.

The training allowed me: (1) learn to prepare different types of reagents and to manipulate equipment related to DNA extraction, measuring the quality and quantity of DNA, (2) Acquire knowledge of different types of genome sequencing and manipulate the equipment used for this purpose: Sanger, Illumina, PacBio and Oxford Nanopore, (3) Management of bioinformatics programs such as UNIX and UBUNTU, used for genotyping. The knowledge acquired were of very high quality since it was given by researchers of recognized international experience and with state-of-the-art infrastructure and equipment of high level.

The training impacted my professional formation and has improved my theoretical and practical knowledge of molecular biology. This knowledge complements my training in the conventional area of genetic improvement of plants. The management of new molecular biology equipment and computer programs will allow for better contributions to the Research



Program of Native Cereals and Grains of the Agrarian University La Molina, which is in the process of improving its biotechnology laboratory.

In Peru, the program of genetic improvement using mutation induction is made in quinoa and Amaranth species. The evaluation of the mutant population from different areas of breeding have permitted to accumulate a great number of data. These data will be processed and analyzed using my knowledge in informatics obtained to the training.

On the other hand, my training will permit me in the near future to initiate the research work for the Ph.D. Program at the National Agrarian University. The research is related to the area of the improvement of crops using mutation induction technology with biotechnology modern tools that I learned during my training in the College of Life Sciences at Brigham Young University.

DENISSE PATRICIA DEZA-MONTOYA

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