

# Andrea Loya Castillo

21 Mellen St  
Cambridge, MA, 02138  
(949) 485-0890  
andrealoyacastillo@gmail.com

## EXPERIENCE

### Harvard University — Research Associate

November 2022 - Present

- Elucidating biosynthetic pathways in plants and insects relevant to agriculture and human health
- Mentoring students in molecular biology techniques
- Developing assays to test for toxicity of various compounds in various organisms

### Quest Diagnostics — Laboratory Associate II

MARCH 2022 - SEPTEMBER 2022

- Managed the specimen intake team for the molecular biology department
- Built assays for various tests
- Assisted in the extraction and analysis process of COVID samples

### Project Grow — Intern

AUGUST 2021 - FEBRUARY 2022

- Learned to restore riparian and wetland environments
- Mentored high school students in conducting college level research projects
- Learned how to conduct ecological surveys for restoration projects

### UC Davis McLaughlin Reserve — Ecological Management Intern

MAY 2021 - AUGUST 2021

- Learned to maintain 7,500+ acre reserve through tending the land
- Conducted academic research for the protection of lands after major wildfires
- Learned how to conduct ecological surveys for land management
- Became proficient in using plant and insect keys to identify various species

### Concordia University, Irvine — Biology Tutor

JANUARY 2020 - MAY 2020

- Provided private instruction to individuals and small groups of BIO 111 and 112 students
- Administered and proctored exams and laboratories to BIO 111 and 112 classes
- Organized semester-long research projects with students
- Coordinated lesson plans with tutoring sessions for students

## SKILLS

Ecological research methods

Proficient in SDM's

Mammalian Cell Culture

Plant identification

Ecological management

Ecological surveys

Assay Building

qPCR & PCR

Molecular Bio Techniques

LC-MS

## LANGUAGES

English

Spanish

## EXTRACURRICULAR

Garden/Ecology Club

Beta Beta Beta Member

Cello/Piano

## **Concordia University, Irvine — *Science Intern***

MAY 2018 - AUGUST 2018

- Organized and conducted experimental studies in propagating plants, maintaining honeybee's, and observing marine species
- Collected and extracted DNA of various insects
- Prepared, identified, and preserved specimen to form a collection
- Maintained 3-acre research garden
- Assisted in the growth and maintenance of mammalian cell culture lines
- Assisted in molecular genetic research of yeast and various species of fish

## **Concordia University, Irvine — *Biology Outreach Coordinator***

AUGUST 2018 - MARCH 2020

- Created various programs that allowed students from grades K-12 to visit the marine lab, research garden, and molecular lab for field trips
- Provided direct service and support to individuals or clients, when needed
- Directed programs and provided lesson plans for future instructions

## **Concordia University, Irvine — *Diversity Director***

AUGUST 2017 - MAY 2018

- Created activities the promoted diversity awareness within the campus
- Directed diversity awareness programs

## **Harvard Museum of Comparative Zoology — *Entomology Intern***

MAY 2019 - AUGUST 2019

- Inventoried over 31,347 specimens, including 415 type specimens, representing 1,500 taxa of bees
- Collected and analyzed biological data about relationships among and between organisms and their environment
- Mentored high school interns

## **Harvard Semitic Museum — *Ancient Egypt Historian Intern***

MAY 2019 - AUGUST 2019

- Documented and scanned archives and archeological artifacts with a 3-D scanner
- Conducted research into further investigation of artifacts

## **EDUCATION**

## **Concordia University, Irvine — *Biology, B.S./History minor***

JUNE 2016 - DECEMBER 2021