

# Nicholas Rivera

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## SKILLS

Cesena, IT

Gel Electrophoresis  
UV/Vis/Fluorescence  
Spectroscopy  
HPLC  
Dynamic Light Scattering

Colorimetry  
SEM  
Texture Analysis  
Rheometry  
GC-FID

Lipid Extraction  
INFOGEST  
Ion-Exchange SPE  
Granulometry  
DSC

Graphpad Prism  
Orange Data Mining  
Python  
ImageJ  
Statgraphics

## EDUCATION

Université Bourgogne  
Franche-Comté-Agrosup Dijon  
9/20-10/22

- **Masters in Microbiology and Physicochemistry of Food and Wine Processes - Assez Bien Honors**
- Coursework in Food Formulation/Component Instrumental Analysis and Chemistry, Microbiology, Sensory Evaluation, Statistics, Toxicology, Food Design, Food Stability, Food Analysis

Dijon, France

Quinnipiac University  
2006-2012

- **Bachelors in Liberal Sciences**

Hamden, CT, USA

## RELEVANT WORK EXPERIENCE

University of  
Bologna-Department of  
Science and Technology  
Agro-Alimentari

- **Research Fellow/Assegnista di Ricerca**
- Investigation of nutritional differences between eco-friendly and non-sustainably produced foods
- In vitro digestion of different food matrices
- Determination of Protein, Starch and Lipid content
- Assistance in developing methods for Lipid purification and novel in vitro digestion techniques

Cesena, Italy

University of  
Valencia-Pharmacy  
Faculty  
4/2022-10/2022

- **Food Processing/Pharmacy Intern**
- Green Technologies for extraction of bioactive molecules from Mushrooms
- Use of Pulsed Electric Fields, Enzyme-assisted extraction, etc
- Quantification of Macromolecules
- SEM for study of morphological changes due to treatments

Valencia, Spain

CHU Dijon  
Hospital/Université de  
Bourgogne  
9/2021-1/2022

- **Virology/Vaccinology Intern**
- Study of virus-like-particles under adverse conditions
- DLS, BCA assay, UV/Vis Spectroscopy for protein study
- SEM, ELISA

Dijon, France

Agrosup Dijon, UMR PAM  
(Food and Wine Science  
and Technology)  
6/2021-8/2021

- **Analytical Chemistry Intern**
- Analysis of agri-food waste
- Study of Polyphenols in Pressed Hempseed Cake related to unwanted organoleptic qualities
- HPLC study and investigation of Hydroxycinnamic acids
- Colorimetric Antioxidant Measurement

Dijon, France

HPA Sonics  
9/2019-5/2020

- **Metallochemistry Engineering Consultant at Alumina Manufacturer**
- Product analysis
- Procedural supervision/handling of chemicals and safe use of machinery
- Data collation and translation for both scientific and non-scientific personnel

Wallingford, CT

Finca Paloma  
1/2019-4/2020 (Remote)  
3/2018-1/2019 (On-Site)

- **Chief Horticulturalist at Tropical Fruit Farm and Vineyard**
- Husbandry of Seedlings, young plants and cuttings
- Fruit Tree and turf management of soil and nutrient parameters

Lajas Arriba, PR  
USA

Earth Matter Soil Start  
Farm  
2/2019-6/2019 (Season)

- **Farm Manager/Instructor for Farming Apprenticeship at Urban Farm/Compost Processing Educational Site**
- Teaching students urban farming
- Assistance with Workshops and Classes for students and visitors

New York, NY

Lehman College  
Spring 2014

- **Genetic Engineering Intern at Advanced Plant Sciences Research Lab**
- Study of Carotenoid biosynthesis in *E. coli*
- Cell Culture and Plasmid Vector utilization
- Extraction and analysis of natural products

New York, NY,

HPA Sonics  
2009-2014

- **Associate researcher at Alumina Manufacturer**
- R&D of prototype reactor and chemical process flow

Wallingford, CT