# **BRIAN D. NGUYEN**

#### **EDUCATION**

## University of California, Irvine

Sept 2016 - May 2022

Ph.D. in Chemistry with concentration in Chemical and Materials Physics

#### University of California, Irvine

Sept 2011 - Mar 2015

B.S. Chemistry, cum laude & B.S. Biology, cum laude

#### **WORK EXPERIENCE**

# Morpho Detection, LLC - Santa Ana, CA

Dec 2015 - Jun 2016

Chemist Intern

- Tested the accuracy of mass spectrometry device for bomb detection and communicated with senior scientists on the development of the devices
- · Calibrated and tested the bomb detection accuracy of the devices for government certification

#### MEDICAL VOLUNTEERING EXPERIENCE

#### UCI Medical Center - Orange, CA

July 2018 - July 2018

EMT On-Site Training

- Shadowed a senior EMT on two 12 hours shifts at the emergency department
- Performed triage of incoming patients, transported patients, and taking vitals during an emergency assessment

#### UCI Medical Center - Orange, CA

Dec 2012 - Jun 2016

College Volunteer

- ullet Dedicated  $\sim$  200 hours volunteering at the ICU, emergency department, neonatal ICU, and operating room
- In the ICU, contributed to comforting patients' stay in the hospital such as bringing a bouquet of flowers and talking with the patient

#### RESEARCH EXPERIENCE

# Graduate Researcher, Chemistry - University of California, Irvine

Sept 2016 - present

Advisor: Filipp Furche

#### **Theory and Development Project**

 Derived, developed, and applied AC-SAPT to diagnose and determine computational methods that can accurately predict noncovalent interactions

# Selected Application-based Project from 3 Different Collaborations

Communicated with experimentalists from the Vanderwal Lab at UCI and modelled the ~400,000 atoms chlorolissoclimide
and 80S ribsome complex using quantum mechanics and expanding the lissoclimide family for protein syntehsis inhibition;
publication in prep

# **SELECTED MENTORING EXPERIENCE FROM 5 ACTIVITIES**

# Furche High School Outreach Program - Irvine, CA

Sept 2016 - June 2022

Program Coordinator

- Led the outreach program to provide research opportunities for underserved communities throughout the United States;
   cultivated a community with 21 high school students and 12 graduate mentors
- Volunteered 5000+ hours and co-authored National Science Foundation grant to support the program

## **SELECTED AWARDS AND HONORS**

UCI School of Physical Sciences Faculty Endowed Fellowship	Jun 2021
UCI Dissertation Fellowship	Jun 2021
UCI Chancellor's Fellowship in Chemistry	Apr 2016
UCI Chancellor's Undergraduate Award of Distinction	Jun 2015
Phi Beta Kappa	May 2015
Phi Lambda Upsilon	May 2015
Hypercube Scholar Award	Jun 2014
OC American Chemical Society Undergraduate Award	Apr 2014