

Christian A. Maino Vieytes, M.S.

DOCTORAL CANDIDATE

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Education

The University of Illinois at Urbana-Champaign

PHD, NUTRITIONAL SCIENCES

Urbana, IL

Anticipated May 2023

- *Concentration:* Nutritional Epidemiology and Data Science
- Advisors: Dr. Anna Arthur, PhD (aarthur4@kumc.edu), MPH, RD and Dr. Zeynep Madak-Erdogan, PhD (zmadake2@illinois.edu)
- Dissertation Committee: Dr. Anna Arthur, PhD, MPH, RD, Dr. Zeynep Madak-Erdogan, PhD, Dr. Sandra Rodriguez-Zas PhD, Dr. Rebecca Smith, PhD

The University of Illinois at Urbana-Champaign

M.S., STATISTICS

Urbana, IL

2022

- GPA: 4.00

The University of Maryland, College Park

B.S., NUTRITIONAL SCIENCE (*Cum Laude*)

College Park, MD

2015

- GPA: 3.83, Major GPA: 3.89

Skills

DevOps AWS, Docker, Kubernetes, Rancher, Vagrant, Packer, Terraform, Jenkins, CircleCI

Back-end Koa, Express, Django, REST API

Front-end Hugo, Redux, React, HTML5, LESS, SASS

Programming Node.js, Python, JAVA, OCaml, LaTeX

Languages Korean, English, Japanese

Experience

The Urban Institute

500 L'Enfant Plaza SW Wash., DC

DATA SCIENCE INTERN

Jun. 2022 - Present

20 hrs/week

- Developed an R package (*fiscal*) for computing fiscal health metrics for nonprofit organizations filing form 990 or form 990-EZ with the IRS.
- Mined, geocoded, and merged data from several public sources for a geospatial analysis of nonprofit density in the United States.
- Designed, created, and implemented a geospatial data dashboard using RShiny for visualizing nonprofit density in the U.S.
- Implemented the Agile/Scrum project management framework in all projects I led and collaborated on.
- Supervisor: Jesse Lecy (jlecy@urban.org)

The University of Illinois at Urbana-Champaign

1201 W. Gregory Drive

Division of Nutritional Sciences

240 ERML

Urbana, IL

GRADUATE RESEARCH ASSISTANT

Aug. 2018 - Present

30 hrs/week

- Evaluate the role of dietary patterns on prognostically-relevant health outcomes using data from a longitudinal cohort study of head-and-neck squamous cell carcinoma patients.
- Use principles of epidemiology and tools from the fields of nutritional epidemiology, data science, and statistics to develop research questions and analytical strategies for my research projects.
- Evaluate the role of food insecurity on dietary behaviors and health outcomes in subjects with a history of cancer by employing NHANES data for this arm of my research.
- Examine the role of food insecurity on health outcomes secondary to COVID-19 in the U.S. using a variety of data sources (USDA, Census Bureau, BEA, AHA, etc.).
- Mentor dietetic interns on a research project during the research rotation of their dietetic internship.
- Mentor undergraduate students taking on individual research projects in nutritional epidemiology.
- Serve as a peer-reviewer for several peer-reviewed journals in the fields of cancer biology and nutritional sciences.
- Supervisor: Anna Arthur (aarthur4@kumc.edu)

The University of Illinois at Urbana-Champaign
Dept. of Crop Sciences

1102 S. Goodwin Ave
AW-101 Turner Hall, MC-046 Urbana,
IL

TEACHING ASSISTANT, CPSC540: APPLIED STATISTICAL METHODS II

Jan. 2021 - Present
15 hrs/week

- Hold a 2-hour weekly recitation/computer laboratory session during the Spring semester.
- Concepts taught are from the experimental design literature and include: linear models and ANOVA, block designs, variations of Latin Squares, logistic regression, and multilevel linear regression.
- Practice and increase the students' familiarity with common statistical software packages (R and SAS, predominantly) through guided sessions that involve application of statistical concepts in software and an introduction to coding/programming.
- Teach practical skills in RStudio (e.g., statistical analysis, data management with *dplyr*, plotting with *ggplot2*, and R Markdown for clarity of presentation).
- Other responsibilities include: holding office hours (1 hour, weekly), grading weekly assigned homework, formulating exam questions, grading exams, and leading lectures in place of the absent professor.
- Supervisor: Alexander Lipka (alipka@illinois.edu)

Champaign Public Health District

201 W. Kenyon Rd.
Champaign, IL

DATA ANALYST

Feb. 2021 - Jul. 2021
8 hrs/week

- Managed and analyzed survey data for a stakeholder analysis evaluating interest and feasibility of farm to school programs in school districts within the Champaign-Urbana region.
- Led the data management and analysis arm of the project.
- Prepared plots for a public presentation in *ggplot2*.
- Prepared and delivered a public presentation on the results of the analysis.
- Supervisor: Jennifer Lotton (jlotton@c-uphd.org)

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TEACHING ASSISTANT, CPSC440: APPLIED STATISTICAL METHODS I

Jan. 2019 - Present
20 hrs/week

- Hold one 2-hour weekly recitation/computer laboratory session where I lecture and lead review statistical concepts learned in the lecture component for up to 80 students.
- Practice and increase the students' familiarity with common statistical software packages (R and SAS, predominantly) through guided sessions that involve application of statistical concepts in software and an introduction to coding/programming.
- Other responsibilities include: holding office hours (2 hours, weekly), grading weekly assigned homework, grading weekly quizzes, formulating exam questions, grading exams, and leading lectures in place of the absent professor.
- Supervisor: Alexander Lipka (alipka@illinois.edu)

The Military Families Learning Network

905 S. Goodwin
343 Bevier Hall
Urbana, IL

CONTRIBUTING AUTHOR, NUTRITION AND WELLNESS RESOURCES

Aug. 2018 - Sep. 2021
10 hrs/week

- Prepared evidence-based blog-posts concerning relevant and contemporary nutrition topics, ranging from different types of diets to describing nutrients of concern.
- Translated scientific literature into comprehensible discourse targeted for a lay audience, comprised predominantly of military service professionals and their families.
- Supervisor: Karen Chapman-Novakofski (kmc@illinois.edu)

Freelance

College Park, MD

BIOCHEMISTRY TUTOR

Oct. 2017 - Aug. 2018
30 hrs/week

- Tutored and mentored undergraduate students who sought additional help with coursework in biochemistry, metabolism, biology, or physiology at the University of Maryland, College Park.

The Manna Food Center

9311 Gaither Road
Gaithersburg, MD

NUTRITION EDUCATOR/GROCERY STORE TOUR LEADER

Jun. 2016 - Aug. 2018
10 hrs/week

- Led free nutrition classes at various grocery store settings in Montgomery County, primarily to a low socioeconomic-status (SES) audience.
- Implemented my background and proficiency in nutrition to communicate optimal methods for consuming healthy foods (to prevent chronic illness) while on a strict budget.
- Supervisor: Jackie DeCarlo (jackie@mannafood.org)

The University of Maryland, Dept. of Kinesiology

4200 Valley Drive

Suite 2242

College Park, MD

Sep. 2017 - Dec. 2017

RESEARCH ASSISTANT

20 hrs/week

- Discerned the role of calcium (Ca²⁺) and sodium (Na⁺) transport and downstream metabolic/energetic implications in both normal/healthy and compromised (heart failure) cardiac mitochondrial models.
- Employed SDS-Page and Western Blot in my methodology.
- Supervisor: Sarah Kuzmiak-Glancy sglancy@umd.edu

The University of Maryland, College Park

College Park, MD

Aug. 2017 - Dec. 2017

GETFRUVED HEALTHY CAMPUS ENVIRONMENTAL AUDIT (HCEA)

10 hrs/week

- Audited the food/dining services, built, and natural environments that serve the 37,000 students attending the University of Maryland using a survey methodology.
- Supervisor: Margaret Udahogora mudahogo@umd.edu

Scribe America, LLC and Arthritis and Rheumatism Associates, P.C.

14995 Shady Grove Road

Suite 250

Rockville, MD

May. 2016 - Jun. 2017

MEDICAL SCRIBE

30 hrs/week

- Served as the personal medical scribe for Dr. Evan Siegel MD.
- Tasks included precise and real-time documentation of patient history, physical exam findings, medical decision-making, differential diagnoses as well as the ordering of lab orders, diagnostic imaging, and assignment of billing codes for each patient encounter.
- Attended several lectures/seminars led by Dr. Siegel and other physicians on the treatment and care of patients with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis with appropriate medical interventions.
- Supervisor: Evan Siegel

Institute for Bioscience and Biotechnology Research (IBBR)

9600 Gudelsky Dr.

Rockville, MD

Feb. 2016 - Jun. 2016

RESEARCH ASSISTANT

30 hrs/week

- Developed compounds (fumagillin derivatives) for the treatment of acute giardiasis.
- Implemented protein purification, enzymatic kinetics assays, bacterial transformation, crystallization/structure resolution, and compound-target characterization as the primary methodological tools.
- Supervisor: Oznat Herzberg oznat@umd.edu

The University of Maryland, Dept. of Nutrition and Food Science

0112 Skinner Building

University of Maryland, College Park

College Park, MD

Jan. 2015 - May. 2015

RESEARCH ASSISTANT

10 hrs/week

- Studied the dose-dependent effects of folic acid on colorectal carcinogenesis and colorectal cancer chemoprevention. Methods employed: cell culture, MTT assay, SDS-PAGE, and western blot
- Supervisor: Seong-Ho Lee slee2000@umd.edu

Scribe America, LLC

Doctors Community Hospital

8118 Good Luck Rd

Lanham, MD

Nov. 2014 - Mar. 2015

EMERGENCY DEPARTMENT MEDICAL SCRIBE

30 hrs/week

- Aided Emergency Department physicians and nurse practitioners accurately document patient visit and chart information.
- Carried out precise and real-time documentation of patient history.
- Recorded physical exam findings, medical decision-making, differential diagnoses, and prepared patients for Emergency Department discharge or hospital admission, as instructed by the attending physician.

The University of Washington, Dept. of Pharmaceutics

H272 Health Science Building
Box 357610
Seattle, WA

SUMMER RESEARCH FELLOW (PHARMACOLOGICAL SCIENCES SUMMER DIVERSITY PROGRAM)

Nov. 2014 - Mar. 2015
40 hrs/week

- Optimized novel compounds targeted for ALDH1a2 inhibition; suppression of retinoic acid biosynthesis.
- Specific tasks included conducting compound synthesis and characterization via 1H-NMR and Mass Spectrometry.
- collected kinetic data for the synthesized compounds to test their efficacy by conducting in-vitro experiments.
- assisted with pharmacokinetic studies in mice.
- Supervisor: John Amory jamory@uw.edu

Scribe America, LLC

INOVA Mt. Vernon Hospital
2501 Parkers Ln.
Alexandria, VA

EMERGENCY DEPARTMENT MEDICAL SCRIBE

May. 2013 - Nov. 2013
30 hrs/week

- Aided Emergency Department physicians and nurse practitioners accurately document patient visit and chart information.
- Carried out precise and real-time documentation of patient history.
- Recorded physical exam findings, medical decision-making, differential diagnoses, and prepared patients for Emergency Department discharge or hospital admission, as instructed by the attending physician.

The University of Maryland, Dept. of Nutrition and Food Science

0112 Skinner Building
University of Maryland, College Park
College Park, MD

RESEARCH ASSISTANT

Aug. 2012 - Feb. 2013
15 hrs/week

- Tested the hypothesis that preadipocyte senescence is mediated by ATM and DNA-PKCS by conducting in vitro experiments.
- Employed techniques included cell culture, fluorescence microscopy, flow cytometry, and Oil-Red-O staining.
- Supervisor: Caroline Rocourt

Extracurricular Activity

B10S (B1t On the Security, Underground hacker team)

S.Korea

CORE MEMBER

Nov. 2011 - PRESENT

- Gained expertise in penetration testing areas, especially targeted on web application and software.
- Participated on a lot of hacking competition and won a good award.
- Held several hacking competitions non-profit, just for fun.

WiseGuys (Hacking & Security research group)

S.Korea

MEMBER

Jun. 2012 - PRESENT

- Gained expertise in hardware hacking areas from penetration testing on several devices including wireless router, smartphone, CCTV and set-top box.
- Trained wannabe hacker about hacking technique from basic to advanced and ethics for white hackers by hosting annual Hacking Camp.

PoApper (Developers' Network of POSTECH)

Pohang, S.Korea

CORE MEMBER & PRESIDENT AT 2013

Jun. 2010 - Jun. 2017

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

PLUS (Laboratory for UNIX Security in POSTECH)

Pohang, S.Korea

MEMBER

Sep. 2010 - Oct. 2011

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.

MSSA (Management Strategy Club of POSTECH)

Pohang, S.Korea

MEMBER

Sep. 2013 - Jun. 2017

- Gained knowledge about several business field like Management, Strategy, Financial and marketing from group study.
- Gained expertise in business strategy areas and insight for various industry from weekly industry analysis session.

Honors & Awards

INTERNATIONAL

2018	Finalist , DEFCON 26th CTF Hacking Competition World Final	Las Vegas, U.S.A
2017	Finalist , DEFCON 25th CTF Hacking Competition World Final	Las Vegas, U.S.A
2014	Finalist , DEFCON 22nd CTF Hacking Competition World Final	Las Vegas, U.S.A
2013	Finalist , DEFCON 21st CTF Hacking Competition World Final	Las Vegas, U.S.A
2011	Finalist , DEFCON 19th CTF Hacking Competition World Final	Las Vegas, U.S.A
2012	6th Place , SECUINSIDE Hacking Competition World Final	Seoul, S.Korea

DOMESTIC

2015	3rd Place , WITHCON Hacking Competition Final	Seoul, S.Korea
2017	Silver Prize , KISA HDCON Hacking Competition Final	Seoul, S.Korea
2013	Silver Prize , KISA HDCON Hacking Competition Final	Seoul, S.Korea
2013	2nd Award , HUST Hacking Festival	S.Korea
2010	3rd Award , HUST Hacking Festival	S.Korea
2012	3rd Award , Holyshield 3rd Hacking Festival	S.Korea
2011	2nd Award , Holyshield 3rd Hacking Festival	S.Korea
2011	5th Place , PADOCON Hacking Competition Final	Seoul, S.Korea

Presentation

DevFest Seoul by Google Developer Group Korea

Seoul, S.Korea

PRESENTER FOR <HOSTING WEB APPLICATION FOR FREE UTILIZING GITHUB, NETLIFY AND CLOUDFLARE>

Nov. 2017

- Introduced the history of web technology and the JAM stack which is for the modern web application development.
- Introduced how to freely host the web application with high performance utilizing global CDN services.

6th CodeEngn (Reverse Engineering Conference)

Seoul, S.Korea

PRESENTER FOR <DEFCON 20TH : THE WAY TO GO TO LAS VEGAS>

Jul. 2012

- Introduced CTF(Capture the Flag) hacking competition and advanced techniques and strategy for CTF

6th Hacking Camp - S.Korea

S.Korea

PRESENTER FOR <METASPLOIT 101>

Sep. 2012

- Introduced basic procedure for penetration testing and how to use Metasploit

Writing

A Guide for Developers in Start-up

Facebook Page

FOUNDER & WRITER

Jan. 2015 - PRESENT

- Drafted daily news for developers in Korea about IT technologies, issues about start-up.

AhnLab

S.Korea

UNDERGRADUATE STUDENT REPORTER

Oct. 2012 - Jul. 2013

- Drafted reports about IT trends and Security issues on AhnLab Company magazine.

Program Committees

2016	Problem Writer , 2016 CODEGATE Hacking Competition World Final	S.Korea
2013	Organizer & Co-director , 1st POSTECH Hackathon	S.Korea
2012	Staff , 7th Hacking Camp	S.Korea
2012	Problem Writer , 1st Hoseo University Teenager Hacking Competition	S.Korea
2012	Staff & Problem Writer , JFF(Just for Fun) Hacking Competition	S.Korea