## C.A. Forté, MPH

Curriculum Vitae | August 2020

Mobile: +1 (404) 772-5067 Email: chanese@umich.edu Location: Ann Arbor, MI

# EDUCATION & CERTIFICATIONS

University	of Michigan, School of Public Health and College of Engineering	
Dual P.h.D.	Environmental Health Sciences and Scientific Computing <i>Advisor:</i> Justin Colacino <i>Dissertation:</i> "Occupational pesticide exposure assessment and deep dive into mechanisms of carcinogenesis"	April 2021 (expected)
The Department of Defense		
Department	of Defense Risk Communication Certified	2015
'Secret' security clearance		2014
The University of Georgia, The College of Public Health		
M.P.H	Epidemiology, <i>Cum laude Advisor</i> : Mark Ebell <i>Capstone Project</i> : "Colorectal Cancer Prevention and Perceptions among  Elderly African Americans residing in Northern Georgia"	2013
Bard College		
B.S.	Honorary	2011
Bard College at Simon's Rock		
B.A.	Major: Biological Sciences   Minor: Cognitive Psychology <i>Advisor:</i> David Myers <i>Thesis:</i> "Health beneficial citrus terpenes, with a focus on citrus limonoids effect on cancer"	2011
A.A.	Liberal Science and Arts	2009

#### TECHNICAL SKILLS

### **Computational Methods**

Machine learning and predictive modeling of how chemical exposures cause epigenetic and genomic alteration

Predictive and prescriptive analytics in STATA

Datamining and big data management in SAS, SQL, and R

Database development and management in SAP and Adobe

Server communications using WinScP, Putty, and Python

Data storage, sharing in Github

Web development using Github pages, HTML, and C++

Comprehensive reporting and data presentation skills using Tableau, Microsoft Excel (pivot charts and pivot tables), and PowerPoint Presentation

### **Experimental Methods**

Computational toxicology, cell culturing techniques, and environmental epidemiology Qualitative and quantitative research methods

Program evaluation, survey item development and meta-analysis skills

Comprehensive biochemical laboratory skills including but not limited to PCR, gas and liquid chromatography, and microbe growth and analysis

Human tissue cell culture and chemical exposure

Husbandry, chemical exposure, surgery outcomes, and disease outcomes in mice

Genetic alteration and method development in mouse knock-out

# FELLOWSHIPS & SCHOLARSHIPS

Rackham Merit Fellowship. The University of Michigan (\$60,000 per year for 3 years).	2018-2021
Riversville Fellow. Bard College at Simon's Rock (\$17,000 per year for 3 years).	2007-2011
Nancunan Saez Scholarship Recipient. Bard College at Simon's Rock (\$500).	2009-2011
Thompson Scholar. Bard College at Simon's Rock (\$1,000 for 2 years).	2009-2011
Hutchinson Scholar. Bard College at Simon's Rock (\$5,000 for 2 years).	2009-2011

### PROFESSIONAL AFFILIATIONS

I	Bouchet Honor Society Member	2020 inductee
	Society of Toxicology, student member	2019-present
	Michigan Society of Toxicology, student member	2017-present
	Consortium of Universities for Global Health (CUGH) High Income Country Student	2016-2018
	Member	

RESEARCH & TRAVEL GRANTS	Forte, C.A. Rackham Research Travel Grants (\$2,000).  Forte, C.A. Environmental Toxicology and Epidemiology Program Fellow. NIH ETEP Training Grant (Grant# T32 ES007062). (\$60,000 for 1 year). PI: Rita Loch Caruso Forte, C.A. CSEAS Thai Studies Award Recipient (\$1,500).  Forte, C.A. Rackham Research Travel Grants (\$2,000).  Forte, C.A. "Occupational Pesticide Exposure of Informal Farmworkers in Northern Thailand". NIOSH ERC Pilot Project Research Training Grant Program (\$19,950). PI:	2018 2017-2018 2017 2017 2016-2017
	Stuart Batterman  Forte, C.A. NIOSH Education Research Center Fellow (Grant # T32 ES007062). (\$60,000 for 1 year). PI: Stuart Batterman	2016-2017
PUBLICATIONS	Thong T*, <b>Forte C.A.*</b> , Hill E, and Colacino J (2019). Environmental exposures, stem cells, and cancer. Pharmacology and Toxicology.  Smith, M. L., Colwell, B., <b>Forté</b> , <b>C. A.</b> , Pulczinski, J. C., & McKyer, E. L. J. (2015). Psychosocial correlates of smokeless tobacco use among Indiana adolescents. Journal of Community Health: 40 (2).  * - These authors contributed equally to this manuscript	2019 2014
SUBMITTED MANUSCRIPTS	<b>Forte, C.A.,</b> Colacino, J., Polemi, K., Guytingco, A., Peraino, N.J., Jindaphong, S., Kaviya, T., Westrick, J., Neitzel, R., Nambunmee, K. (2019). Pesticide exposure and adverse health effects associated with farm work in Northern Thailand.	2020
MANUSCRIPTS IN PREPARATION	Forte, C.A., Justin Colacino (2020). A comprehensive exposure assessment of pesticide exposure and mechanisms for breast cancer.  Forte, C.A., Anagha Tapaswi, Nicholas Cemalovic, Justin Colacino (2020). Assessing mechanisms of carcinogenesis due to pesticide exposure.	2020
HONORS AND AWARDS	Bouchet Honor Society Member 2020 Outstanding Undergraduate Research Opportunity Program Mentor Award Honors Convocation Celebration, <i>Student Speaker</i>	2020-present 2020 2010
CONFERENCE PRESENTATIONS	<b>Forte, C.A.</b> Pesticide exposure among N. Thailand Farmworkers. The Society of Toxicology Annual Meeting. March 3, 2019, Baltimore, MD, USA (Poster Presentation).	2019
	<b>Forte, C.A.</b> Nambunmee K, Guytingco A, Neitzel R, Colacino J. Pesticide exposure and health effects among N. Thailand Farmworkers. 23 <sup>rd</sup> Annual National Institute of Health Environmental Toxicology and Epidemiology Program. Research Symposium February 2, 2018, Ann Arbor, MI, USA (Poster	2018
	Presentation).  Forte, C.A. Colacino J, Guytingco A, Neitzel R, Nambunmee K,. Pesticide exposure and health effects among N. Thailand Farmworkers. The National Institute of Occupational Safety and Health Education Research Center, Center for Occupational Health and Safety Engineering Conference at the University of Illinois Chicago. Research Symposium March 9-11, 2018, Chicago, IL, USA (Poster Presentation).	2018
	Forte, C.A. Nambunmee K, Guytingco A, Neitzel R, Colacino J. Pesticide exposure and health effects among N. Thailand Farmworkers. The University of Michigan Lifestage Environmental Exposures and Disease Center 2018 Environmental Statistics Day March 14, 2018, Ann Arbor, MI, USA (Poster Presentation).	2018
	<b>Forte, C.A.</b> Colacino J, Guytingco A, Neitzel R, Nambunmee K. Pesticide exposure among N. Thailand Farmworkers. The 9 <sup>th</sup> Annual Consortium of Universities for Global Health Conference March 15-18, 2018, New York, NY,	2018
	USA (Poster Presentation).  Forte, C.A. Pesticide exposure among N. Thailand Farmworkers. The Michigan Society of Toxicology Annual Meeting. March 2017, Detroit, MI, USA (Student Speaker).	2017

## CONFERENCES ATTENDED

Out in Sciences, Technology, Engineering and Mathematics Annual Conference, *Detroit, MI* 

The Annual American Public Health Association (APHA) Meeting, Atlanta, GA

2016-present

2018

#### RESEARCH EXPERIENCE

Doctoral Student and Fellow, Environmental Health Sciences, The University of Michigan, Ann Arbor, MI; PI: Justin Colacino

- Managed multiple projects focused on epigenetic alteration of human cancer sampling, which included culturing primary human tissue
- Assessed environmental chemical exposures among agriculture workers in Northern Thailand and the United States
- High throughput content imaging, experiment protocol development and machine learning using genomic data.

Doctoral Student Researcher, Data Library Sciences, The University of Michigan, Ann 2019-2020 Arbor, MI; PI: Rachel Woodbrook

- Interviewed research subjects and disseminating a survey to assess how diversity scholars collect, manage, and disseminate data
- Consulted as a subject matter expert on ethical research practices, research fairness, and open data access
- Assisted in study design and developing the methods for data analysis and data toolkit creation
- Coded the UM Library Sciences github repository of data and github page using HTML and C++

Research Assistant The University of Georgia Graduate School, Athens, GA

2012-2013

- Analyzed and reported the risk factors associated with underrepresented minority attrition and completion of STEM doctoral programs according to student survey responses under the purview of the Council of Graduate Schools
- Oversaw contracts, grants, awards and cooperative agreements with full responsibility for carrying out all required monitoring and management duties

Research Analyst The University of Georgia College of Public Health, Athens, GA; PI: 2012 Mark Ebell

- Administered a pre and post intervention survey focused on colorectal cancer prevention amongst elderly African Americans residing in northeast Georgia using Epi Info to test the effectiveness of the intervention and inform quality improvement
- Completed an ANOVA, paired T-test, and presented the results using SAS, Microsoft Excel, and STATA

Laboratory Assistant Bard College at Simon's Rock, Great Barrington, MA; PI: David 2010-2011 Myers

- Developed isolation methods for the extraction of citrus limonoids and analyzed the antibiotic and anticancer effects using disk diffusion
- Organized, stocked, and oversaw laboratory maintenance by cleaning the laboratory, monitoring supply stock and ordering new materials

Data Analyst and Program Evaluator South Berkshire Community Coalition, Great 2009-2011 Barrington, MA

- Examined information pulled from the Massachusetts Youth Risk Behavior Surveillance System (YRBSS) in order to develop programs to prevent adolescent alcohol and drug use
- Assisted in the development and implementation of adolescent drug abuse interventions such as Massachusetts' first prescription drug take back program by providing event planning expertise and recruiting volunteers

# PROFESSIONAL EXPERIENCE

Deployment Health Epidemiologist *The US Department of Defense, Norfolk, VA*; 2014-2016 Supervisor: Christopher Rennix (ret.)

- Researched Post Traumatic Stress Disorder (PTSD) and sleep disorder predictors and symptoms amongst deployed sailors and marines in order to better inform Navy standards and procedures for prevention and treatment of combat related illness
- Analyzed and disseminated key fleet health statistics to ensure command-wide understanding of the current deployed sailor and marine health status
- Advancing the literature on behavioral health through the innovation and publishing of cornerstone military population health research

Pharmacoepidemiology Specialist UCB Biosciences, Inc., Smyrna, GA; Supervisor: 2013-2014 Dr. Eric Phillips

- Developed new company measures such as validated claims data algorithm and a benefit risk analysis brief through core company data sheets, meta-analysis, population-based health statistics and external automated databases
- Served as expert in pharmacoepidemiological research as it pertains to autoimmune pharmaceuticals by leading research endeavors and providing guidance to other departments
- Corresponded with other pharmaceutical companies to ensure product complain reporting, comprehensive social listening, and adverse event reporting

Clinical Analytics and Support Specialist Athens Regional Medical Center, Athens, GA 2012-2013; Supervisor: CJ Hood

- Accrued, analyzed, and disseminated a community needs assessment focused on cancer disparity barriers which included creating tableau reports and dashboards for multiple departments and estimated appropriate study size for internal and external clients
- Wrote comprehensive statistical and analytic reports from studies and continuing projects using national, state, and hospital surveillance systems

### MEDIA FEATURES

Forte, C.A. (June 2020) Mental Health, Incarceration, and COVID-19. The University of Michigan School of Public Health The Pursuit	2020
Blog.	
Forte, C.A. (March 2020). Earth Day at 50: Chanese Forte on	
Environmental Health Sciences. The University of Michigan	
Michigan Minds podcast.	
The University of Michigan School of Public Health. (October 2018).	2018
Research and Equity in Global Public Health. The Pursuit.	
Feature on @umichgradschool Instagram account for the	2017
#myrackhamsummer photo challenge	
Twitter handle takeover of the @umichstudents account	2017

#### MENTORED STUDENTS

Yamani Vinson, Sexual and Gender Diversity in Public Health	2019-present
Mentoring Program, The University of Michigan Nicholas Cemalovic, UROP Research Program, The University of	2019- present
Michigan	2017- present
Nia Willis, UM School of Public Health Undergraduate Mentoring	2017-2018
program, The University of Michigan	
Advisor, Pre-professional student in Medicine and the Biological	2009-2011
Sciences, Bard College at Simon's Rock	
Peer Advocate to Peer Advocate mentor, Student housing and Life,	2009-2011
Bard College at Simon's Rock	

TEACHING EXPERIENCES	Public Health Biology and Pathophysiology (PUBHLTH 370). Fall 2020 semester, Ann Arbor, MI, USA (Graduate Student Instructor). The University of Michigan: Online due to COVID19.	2020
	"Pesticide exposure among N. Thailand Farmworkers". Environmental Toxicants (ENV310) Course. The University of Michigan: Ann Arbor, MI, USA (Guest Lecturer).	2020
	"Professionalism in Public Health (PUBHLTH481)". The University of Michigan: Ann Arbor, MI, USA (Curriculum Consultant).	2019
	"Pesticide exposure among N. Thailand Farmworkers". Environmental Toxicants (ENV310) Course. The University of Michigan: Ann Arbor, MI, USA (Guest Lecturer).	2019
	Pesticide exposure among N. Thailand Farmworkers. Environmental Toxicants (ENV310) Course. The University of Michigan: Ann Arbor, MI, USA (Guest Lecturer).	2018
OUTREACH & COMMUNITY SERVICE	The University of Michigan Service Day Site Lead, <i>The University of Michigan School of Public Health, Ann Arbor, MI</i>	2019
COMMUNITY SERVICE	Mentor for young girls, UpCenter Mentoring Program, Norfolk, VA Student researcher and intern, Volunteers in Medicine, Great Barrington, MA Member and Event Organization, Medical Reserve Corps New England, Great	2015-2016 2007-2010
	Barrington, MA	
PROFESSIONAL SERVICE	UMSPH Environmental Health Services Faculty Search Committee Society of Toxicology (SOT) Pesticides Poster Chair	2019-2020 2019
	University of Michigan Environmental Toxicology and Epidemiology Program (ETEP) Annual Research Symposium Planning Committee Co-Chair	2018
	University of Michigan Environmental Toxicology and Epidemiology Program Annual Research Symposium Speaker Host	2017
	University of Michigan Environmental Toxicology and Epidemiology Program Annual Research Symposium Speaker Host	2017
University Outreach	Forte, C.A., Wolverine Pathways Academic Career Day. The Association of	2020
& SERVICE	Multicultural Scientists. The University of Michigan, Ann Arbor, MI, USA (Presenter). <b>Forte, C.A.,</b> UROP Career Development Presentations. The University of Michigan,	2020
	Ann Arbor, MI, USA (Presenter).  The University of Michigan College of Engineering Student Recruiter, <i>The Annual Out</i>	2019
	in STEM Conference, Detroit, MI Admissions Ambassador, The University of Michigan School of Public Health, Ann	2019-2020
	Arbor, MI  Forte, C.A., UROP Graduate School Fair Panel. The University of Michigan, Ann	2019
	Arbor, MI, USA (Panelist).  Forte C.A., UROP Graduate School Panel Discussion. The University of Michigan, Ann	2018
	Arbor, MI, USA (Panelist). Co-founder and President of the UM SPH Sexual and Gender	2018-2020
	Diversity in Public Health (SGDPH), The University of Michigan, Ann Arbor, MI	
	Board member of the Rackham Student Government (RSG), The	2016-2017
	University of Michigan, Ann Arbor, MI University of Michigan Academic Affairs Committee Member, The	2016-2017
	University of Michigan, Ann Arbor, MI  Member of the Student Advocacy for Graduate Education (SAGE),	2016-2018
	The University of Michigan, Ann Arbor, MI Rackham Student Government, Board Member, The University of	2017-2018
	Michigan, Ann Arbor, MI Resident Assistant, The University of Georgia, Graduate and	
	International Student Housing, Athens, GA Resident Assistant and Peer Advocate, , Bard College at Simon's	2008-2011
	Rock, Student Life Department, Great Barrington, MA Student Liaison to Barton Biggs and the Riversville Foundation, Bard	2010
	College at Simon's Rock, Great Barrington, MA President and co-founder, The Pre-Medical Society, Bard College at	2007-2009
	Simon's Rock, Great Barrington, MA	