



CALIFORNIA NORTHSTATE UNIVERSITY COLLEGE OF PHARMACY

RESEARCH IN 2020

RESEARCH AT CALIFORNIA NORTHSTATE UNIVERSITY COLLEGE OF PHARMACY

California Northstate University College of Pharmacy (CNUCOP) is dedicated to advancing the science and art of pharmacy. Faculty and student research/scholarship initiatives are a critical component of the CNUCOP mission.



Research Facilities

Our 2100 square feet research facility at the Elk Grove campus contains laboratory space and equipment for faculty members to conduct in vitro research studies. We recently completed a new laboratory wing encompassing about 900 square feet of additional research space



Research Focus Areas

Research projects are being conducted by CNUCOP faculty within several focus areas, listed below. Further pertinent information on Faculty Research and Scholarship Interests, as well as publications can be found within the research section of the CNUCOP website. The website link is attached here: <http://pharmacy.cnsu.edu/>

CANCER RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Ruth Vinall, Ph.D.	PBS	Prostate and Bladder Cancer
Ashim Malhotra, Ph.D.	PBS	Pancreatic Cancer

CARDIOVASCULAR DISEASE RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Tony Eid, Pharm	EE	Preventive Cardiology
Zhuqiu (James) Jin, Ph.D.	PBS	S1P Receptor Signaling & Cardiac Fibrosis
Islam Mohamed, Ph.D.	PBS	Role of Vascular micro-RNAs in Atherosclerosis

CLINICAL CARE & OUTCOMES RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Eugene Kreys, Pharm, Ph.D.	CAS	Medication Adherence on Clinical Outcomes
Bin Deng, Pharm	CAS	Primary Care in Underserved Areas
Tarek Kassem, Ph.D.	PBS	Adherence Education, Implementation & Follow-up

DATA ANALYSIS SCHOLARSHIP

FACULTY	DEPARTMENT	RESEARCH INTEREST
Tuan Tran, Ph.D.	CAS	Data analysis and Mining

DIABETES & KIDNEY RESEARCH AND SCHOLARSHIP

FACULTY	DEPARTMENT	RESEARCH INTEREST
Linh Ho, Ph.D.	PBS	Mitochondrial Sirtuins & Type 2 Diabetes
Olivia Phung, Pharm	CAS	Meta-analyses & Diabetes Treatment
Matthew Horton, Pharm	CAS	Acute/Chronic Kidney Injury/Disease

DRUG DELIVERY RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Uyen Le, Ph.D.	PBS	Drug Solubility
Fitsum Sahle, Ph.D.	PBS	Drug Delivery, Nanotechnology

INFLAMMATION RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Hongbin Wang, Ph.D.	PBS	Complement Fragment C4a Interaction with PAR

INFECTIOUS DISEASE RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Abdelbasset Farahat, Ph.D.	PBS	Design and Synthesis of Di-Cationic Compounds. Leukemia.

MICROBIOLOGY & VIROLOGY RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Justin Lenhard, Pharm	CAS	In Vitro Suppression of Antibacterial Resistance
Ahmed El-Shamy, Ph.D.	PBS	Virus and Host Cell Interactions

NATURAL PRODUCTS AND PLANT PHYSIOLOGY RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Simeon Kotchoni, Ph.D.	PBS	Plant Physiology
Tibebe Woldemariam, Ph.D.	PBS	Natural Products Chemistry

PSYCHIATRY & SUBSTANCE ABUSE RESEARCH

FACULTY	DEPARTMENT	RESEARCH INTEREST
Tiffany Kreys, Pharm	CAS	Anxiety Disorders
Erika Titus-Lay, Pharm	CAS	Substance Abuse Disorders

TEAM BASED LEARNING (TBL) & TEACHING RELATED SCHOLARSHIP

FACULTY	DEPARTMENT	RESEARCH INTEREST
Suzanne Clark, Ph.D.	PBS	TBL Related Scholarship
Uyen Le, Ph.D.	PBS	Teaching Scholarship
Welly Mente, Ph.D.	CAS	Clinical Teaching Related Scholarship

Editorial Board Members

Many CNUCOP faculty members serve as editor or on editorial boards of peer-review scientific journals.

FACULTY	EDITOR/EDITORIAL BOARD
Linh Ho, Ph.D.	Inflammopharmacology
Tony Eid, PharmD.	Journal of Pharmacy Practice, American Journal of Health Systems Pharmacy, Medicine Editorial, Digital Health
Tibebe Woldemariam, Ph.D.	Journal of Pharmacovigilance, Journal of Integrated Omics, Journal of Pharmacology & Clinical Toxicology, Journal of Medicinal Chemistry & Toxicology
James Jin, Ph.D.	Journal of Drug Research and Development
Eugene Kreys, Ph.D.	Research in Social and Administrative Pharmacy
Hongbin Wang, Ph.D.	Frontiers in Immunology
Ashim Malhotra, Ph.D.	Journal of Radioprotective Research
Ruth Vinall, Ph.D.	Biomedicines



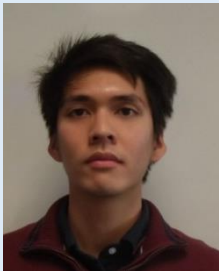

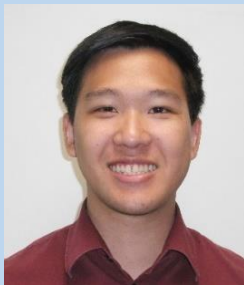

CNUCOP Seed Grant

The purpose of the internal Seed Grant Award program is to provide funds to CNUCOP faculty members for scholarly activities that will generate a research publication(s) and/or preliminary data for external funding. Currently, there are five Seed Grant winners.

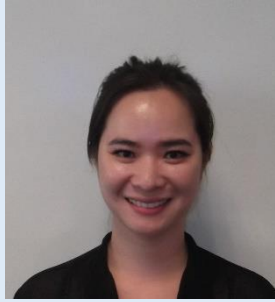
- 1) **Dr. Simeon Kotchoni (PI), Dr. Uyen Le (collaborator):** Improving anti-tumor activity of *C. latifolium* on cervical cancer via nanotechnology.
- 2) **Dr. Fitsum Sahle (PI), Dr. Islam Mohammed (collaborator):** Development of miR-146a-loaded nanogels to treat shear-induced vascular inflammation.
- 3) **Dr. Islam Mohammed (PI):** Role of PCSK9 in Acute Oscillatory Shear Stress-induced Vascular Dysfunction.
- 4) **Dr. Hongbin Wang (PI):** C4a inhibits thrombin-induced diabetic vasculopathy in human vascular smooth muscle cells (VSMCs)
- 5) **Dr. Jason Bandy (PI), Drs. Olivia Phung, Matthew Horton, Song Oh, Victor Phan, Jeffrey Nehira, and Tony Eid (collaborators):** Evaluation of Student Pharmacists' Ability to Measure Blood Pressure

CNUCOP Student Research

The CNUCOP administration encourages student research with faculty mentors. In 2016, CNUCOP initiated an inaugural Student Summer Research Fellowship Program. During 2020, six summer research fellowships were awarded to CNUCOP pharmacy students.

STUDENT	FACULTY MENTOR
Victor Changcoco 	Dr. Hongbin Wang 
Sang Anh Phan 	Dr. Justin Lenhard 
Kenneth Cheng 	Dr. Fitsum Sahle 

Vy Tran Luu



Dr. Justin Lenhard



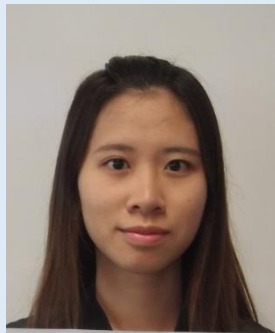
Alexander Akerlund



Dr. Eugene Kreys



Luling Li



Dr. Islam Mohamed



Key Research Personnel (CNUCOP)

Under the guidance of Dean Xiaodong Feng, key research personnel at CNUCOP include Dr. Ruth Vinall, Ms. Melanie Rose and Dr. Tuan Tran. Dr. Vinall has served as the Assistant Dean of Research at CNUCOP since 2019. Ms. Rose has a M.S. Degree in Stem Cell Biology and supervises the Elk-Grove campus research laboratory as the lab manager. Dr. Tuan Tran is the current chair of the research committee at CNUCOP.



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