CAMERON STOUFFER

Clemson, SC · 717-809-6604
cstouff@g.clemson.edu · www.linkedin.com/in/cameron-stouffer-4431381a0

EDUCATION

AUGUST 2018- MAY 2021

CHEMISTRY-BIOCHEMISTRY OPTION B.S., BLOOMSBURG UNIVERSITY

ADVISOR: DR. MICHAEL BORLAND

Completed courses in organic, inorganic, physical, bio-, and instrumental/analytical chemistry. Performed research with aim to develop and optimize the technique of chromatin immunoprecipitation (ChIP) in a malignant melanoma cell culture model to examine dynamic modulation of chromatin architecture by peroxisome proliferator-activated receptors, PPARβ/δ. Graduated from the Honors College and studied abroad for a semester at Jagiellonian University.

AUGUST 2021- PRESENT

CHEMISTRY PH.D., CLEMSON UNIVERSITY

ADVISOR: DR. R. KENNETH MARCUS

Currently working towards a Ph.D. in chemistry. Completed courses in organic, physical, and inorganic chemistry, as well as separation science, bioanalytical chemistry, mass spectrometry, and spectroscopy. Current research focuses on trace level metal determination from a cloth swipe and dried blood spots using the Advion Plate Express microextraction coupled to the Advion Solation ICP-MS. Other research focuses on the determination of total metal mass balance in CHO cell media using an inline HPLC/ICP-MS platform.

EXPERIENCE

JUNE 2021 – PRESENT

RESEARCH ASSISTANT, CLEMSON UNIVERSITY

Method development and validation using the LS-APGD microplasma with various mass spectrometers to determine cobalt effect on vitamin B12 speciation as well as halogen determinations as positive and negative ions. Proposed work will investigate method development of lanthanide labeled exosomes identification using an ICP-MS.

AUGUST 2021 – MAY 2022

TEACHING ASSISTANT, CLEMSON UNIVERSITY

Facilitated an effective learning environment for undergraduate students of general chemistry and instrumental chemistry, as experiments were done safely, implementing an independent critical thinking workflow through method development. Evaluated and provided feedback for formal lab reports, lab notebooks, and oral presentations.

TECHNICAL SKILLS

UV/Vis Spectrometry
Hydrogen nuclear magnetic resonance (^{1}H NMR)
pH meter
Fluoride ion-selective electrode
Sterile cell culture (aseptic technique)
BSL-2 lab experience
Gel electrophoresis
Quantitative DNA real-time PCR
Differential scanning calorimetry (DSC)
Liquid sampling atmospheric glow discharge (LS-APGD) microplasma
Optical emission spectroscopy (OES)
Atomic absorption spectroscopy (AAS)
Micro-pipetting
Carbon nuclear magnetic resonance (^{14}C NMR)
Gas chromatography (GS)
Infrared (IR) spectroscopy
Cell fixation/centrifugation
DNA shearing and immunoprecipitation
Gas chromatography-mass spectrophotometry (GC-MS)
Combustion calorimeter
Inductively coupled plasma
Mass spectrometry (MS)
Atomic emission spectroscopy (AES)

HONORS AND AWARDS

DR. EARL C. RAY '38 STUDENT ENDOWMENT FELLOWSHIP— **CLEMSON UNIVERSITY**, **CLEMSON, SC** 2021 - 2022
Awarded for efforts during the first year of graduate studies by an appointed faculty committee in the Department of Chemistry at Clemson University.

FRESHMAN CHEMISTRY STUDENT OF THE YEAR AWARD — **BLOOMSBURG UNIVERSITY**, **BLOOMSBURG, PA** 2018 - 2019
Awarded for academic excellence during the first year of undergraduate chemistry studies by an appointed faculty committee in the Department of Chemistry at Bloomsburg University.

COMMUNITY SERVICE AND ENGAGEMENT

WELLNESS IN GRADUATE SCHOOL (WINGS) COALITION—**CLEMSON, SC** 2021-PRESENT
I serve as the Vice President of this organization. We aim to improve the mental and physical well-being of all graduate students.

ROTARACT CLUB—**CLEMSON, SC** 2021-PRESENT
I serve as a member of this organization. This organization participates in local, national, and international community service including the eradication of polio, can tabs for the Ronald McDonald House, community garden clean up, etc.

THE WALK TO END ALZHEIMER'S— **ANDERSON, SC** 2022-PRESENT
I serve as a walk day committee volunteer and team captain for this organization. This organization raises money and awareness for Alzheimer's disease research. Their goal is to eradicate Alzheimer's disease.

SCIENCE STUDENT ADVISORY BOARD—**CLEMSON, SC** 2022-PRESENT
I serve as a board member. This organization works towards improving the image and the overall success of the College of Science at Clemson University by advising the administration on new program implementations and community outreach.

PUBLICATIONS

Cameron J. Stouffer, Sarah K. Wysor, Joseph V. Goodwin, and R. Kenneth Marcus. Comparative Characterization of Elemental and Ligated Cobalt in Vitamin B_{12} (VB_{12}) using the Liquid Sampling-Atmospheric Pressure Glow Discharge (LS-APGD) Microplasma and a Heated Electrospray Ionization (HESI) Source (in progress).

Cameron J. Stouffer and R. Kenneth Marcus. Halogen Determination using a Liquid Sampling-Atmospheric Pressure Glow Discharge (LS-APGD) Microplasma Ionization Source Coupled to a Commercial Triple-Quadrupole Mass Spectrometer (in progress).

Cameron J. Stouffer and R. Kenneth Marcus. Direct Metal Determination from Cotton Swipes via Advion Plate Express Microextraction Coupled to Advion Solation ICP-MS (in progress).

CONFERENCE PROCEEDINGS

Cameron Stouffer, Joseph Goodwin, Sarah Wysor, Dr. Kenneth Marcus. Characterization of Elemental and Ligated Cobalt Using the Liquid Sampling-Atmospheric Pressure Glow Discharge (LS-APGD) Microplasma. Winter Plasma 2022.

Cameron Stouffer, Joseph Goodwin, Sarah Wysor, Dr. Kenneth Marcus. Characterization of Elemental and Ligated Cobalt in Vitamin B12 using the Liquid Sampling-Atmospheric Pressure Glow Discharge Microplasma. SciX 2022.

Cameron Stouffer and Dr. Kenneth Marcus. Halogen Determinations using a Liquid Sampling-Atmospheric Pressure Glow Discharge Microplasma Ion Source Coupled to a Commercial Mass Spectrometer. SciX 2022.

Cameron Stouffer and Dr. Kenneth Marcus. Halogen Determinations using a Liquid Sampling-Atmospheric Pressure Glow Discharge Microplasma Ion Source Coupled to a Commercial Mass Spectrometer. Pittcon 2023.

Cameron Stouffer and Dr. Kenneth Marcus. Direct Metal Determination from Cotton Swipes via Advion Plate Express Microextraction Coupled to Advion Solation ICP-MS. Pittcon 2023.

CERTIFICATIONS

HAZARDOUS WASTE MANAGEMENT—CLEMSON UNIVERSITY, CLEMSON, SC 2021

RADIATION SAFETY—CLEMSON UNIVERSITY, CLEMSON, SC 2022