# **NATALIE E. BULGER**

bulgern20@gmail.com | (206) 743 - 4712 | 6015 Lakeview Dr Unit #5, Kirkland WA 98033

### **EDUCATION**

#### CARLETON COLLEGE, Northfield, MN: B.A. in Chemistry

Graduated: March 17th, 2019

## HOFSTRA UNIVERSITY, Hempstead, NY: M.S. in Sports Science

Graduated: June 29th, 2021

# **CERTIFICATIONS**

- NREMT; WA State EMT (IV-M)
- Stop the Bleed Instructor
- CPR/AED

- CITI Training
- NASM CPT
- OTFit

#### PROFESSIONAL EXPERIENCE

# **CURRENT WORK EXPERIENCE**

#### FITNESS INSTRUCTOR

Orangetheory - Mercer Island, NY

July 2021 – Current

- Change of location same job description as Fitness Instructor in Hewlett, NY
- Instruct group fitness classes (38 people)

#### FITNESS INSTRUCTOR

Orangetheory - Hewlett, NY

April 2021 – June 2021

- Instruct group fitness classes (12-24 people 33.3%-50% capacity due to COVID-19 restrictions) that utilize the treadmill, rowing machine, dumbbell, bosu ball, and TRX movements
- Demonstrate all exercises in the strength block
- Monitor participants' heart rate zones to ensure safety and appropriate internal response to exercise
- Utilize multitasking to keep two to three groups active at once

#### RESEARCH COORDINATOR

Harborview Medical Center & Seattle Fire Medic One - Seattle, WA

August 2020 - June 2021

- Promotion from the research assistant position listed below
- Work on a plethora of research projects primarily involving airway management and end-tidal carbon dioxide
- Work with a variety of softwares including: REDCap, STATA, ORCA, CODESTAT, ESO, and CAD
- Presented ongoing research at national conferences
- Completed IRB requests, research grants, and research manuscripts
- Work on a research team with a wide variety of personnel including physicians, researchers, firefighters, and paramedics
- Manage and schedule current research assistants and maintain a record of the status of current research projects

# INTERN STRENGTH & CONDITIONING COACH

Hofstra University - Hempstead, NY

February 2021 – May 2021

- Assist with set-up and breakdown of strength & conditioning lifts for NCAA D1 athletes
- Coach NCAA D1 athletes on a variety of strength & conditioning movements
- Demonstrate new exercises, lead warm-ups and exercise programs for a variety of sports
- Wrote a hypothetical annual plan and off-season program for men's and women's NCAA D1 cross country runners
- Participated in weekly intern meetings to discuss pertinent and current research in sports science

#### OTHER COACHING EXPERIENCE

#### **GYMNASTICS COACH**

Northfield Gymnastics - Northfield, MN

- Coached all levels of gymnasts ages 3-18
- Head coach for Northfield gymnastics pre-competitive team September 2016 May 2017
- Assistant coach for Northfield gymnastics competitive team January 2017 December 2017
- Organized and attended meets for both boys and girls
- Created and led lesson plans for all four events (vault, bars, beam, floor) and conditioning
- Coached Northfield Special Olympics team January 2018 May 2018

#### **GYMNASTICS COACH**

Tech Gymnastics - Woodinville, WA

June 2016 – August 2017

October 2015 – May 2018

- Former ongoing summer and winter break experience
- Coached USAG level 2 and 3 + Excel Bronze through Platinum

- Choreographed floor routines for Excel silver and platinum
- Created and led lesson plans for all four events (vault, bars, beam, floor) and conditioning
- Coached adult gymnastics class classes

#### OTHER RESEARCH EXPERIENCE

#### **RESEARCH ASSISTANT**

Harborview Medical Center & Seattle Fire Medic One - Seattle, WA

June 2018 – August 2020

- Maintain Seattle's cardiac arrest registry by reviewing each case, verifying the data collected and drafting quality improvement feedback to providers
  on the call
- Assist with a variety of research projects involving: cardiac arrest, advanced airway management, end tidal carbon dioxide, and stroke
- Work with a variety of softwares including: REDCap, STATA, ORCA, CODESTAT, ESO, and CAD
- Work on a research team with a wide variety of personnel including physicians, researchers, managers, administrators, firefighters, paramedics, and fellow pre-med graduates

#### INTERN RESEARCH ASSISTANT

Harborview Injury Prevention & Research Center - Seattle, WA

June 2017 – August 2017

- Conducted an independent project on the Trauma Patient Transfer Process at Harborview under the guidance of a physician mentor
- Assisted on an ongoing research project at Seattle Children's Hospital for the presence of safe firearm storage in households in the greater Washington area.
- Worked with the Dedoose software for qualitative research projects
- Attended multiple lectures per week on various clinical topics
- Shadow my physician mentor in clinics and the operating room

#### **VOLUNTEER RESEARCH ASSISTANT**

Harborview Medical Center Department of Trauma Surgery - Seattle WA

June 2016 – December 2016

- Assisted with sample collection and processing as well data entry for a randomized clinical trial for dosage delivery of tranexamic acid (TXA) in the prehospital setting, by Seattle Fire intensive care paramedics, for traumatic brain injuries
- Worked night shifts (7p-7a) on Fridays and Saturdays
- Used many wet lab techniques, including micro-pipetting, centrifuging, working in a fume hood, and use of a TEG apparatus
- Follow a multi-step protocol in a wet lab research setting
- Interacted with paramedics to collect the TXA kits and interacted with nurses to collect blood samples from the patients to be processed in the lab
- Screened for patients that met the criteria for other ongoing clinical research projects while on shift

#### **CLINICAL EXPERIENCE**

#### **EMERGENCY MEDICAL TECHNICIAN**

Northwest Ambulance - Everett, WA

June 2019 – June 2020

- Work one shift per week, ranging from 10-24 hours
- Work on different rigs throughout King, Snohomish, and Pierce Counties
- Work on both 911 and interfacility rigs to transport a variety of Basic Life Support patients
- Perform patient assessments, take basic vital signs (heart rate, respiratory rate, blood pressure, temperature, blood glucose levels, oxygen saturation), and participate in a two provider team during each shift
- Interact with nurses, physicians, firefighters, and paramedics during every shift

# **VOLUNTEER EMERGENCY MEDICAL TECHNICIAN**

Northfield Emergency Medical Services - Northfield, MN

January 2017 – March 2019

- Founding member & Leadership role in EMT club on the Carleton College campus
- Stop the Bleed program coordinator and instructor on the Carleton Campus
- Volunteering as an instructor for the ongoing EMR and EMT educational training

# **SKILLS**

- Software: Microsoft Office, Tableau, STATA, REDCap, CODESTAT
- Trained in: HIPAA guidelines, Arrive Alive, ORCA, CAD, ESO, HIV/AIDs, Logis, Pulsara, IRB
- Processing of laboratory samples
- Excellent written and verbal communication skills

- Medical Terminology
- Planning, Attention to detail, Problem solving
- Upbeat personality & active runner

#### PRESENTATIONS & PUBLICATIONS

- Bulger N et al. (2020, January). NAEMSP Poster and Presentation Review. Powerpoint presented at EMS Fellowship Lectures, Seattle, WA.
- Grabman B, **Bulger N** et al. (2020, January). Can End-Tidal Carbon Dioxide be Used as a Prognostic Indicator of Out-of-Hospital Cardiac Arrest? Poster Presentation to the National Association of EMS Physicians, San Diego, CA.

- Murphy D, **Bulger N** et al. (2020, August). *Time to Tracheal Intubation after Out-of-Hospital Cardiac Arrest and Association with Survival.*Podium Presentation at Society for Academic Emergency Medicine, Virtual (COVID-19).
- **Bulger N** et al. (2020, September). *Prehospital End Tidal Carbon Dioxide Predicts Hemorrhagic Shock Upon Emergency Department Arrival.* Poster Presentation at American Association for the Surgery on Trauma, Virtual (COVID-19).
- Synder B, **Bulger** et al. (2020, November). Association of Small Adult Ventilation Bags with Return of Spontaneous Circulation in Out of Hospital Cardiac Arrest. Poster Presentation to American Heart Association Resuscitation Science Symposium, Virtual (COVID-19).
- Counts CR, Latimer A, Bulger N (2021, January). ETCO2 in EMS: Questioning the Status Quo. Podium Presentation at National Association of EMS Physicians, Virtual (COVID-19).
- Abrahamowicz A, **Bulger N** et al. (2021, May). *The Association Between Arterial-End-Tidal Carbon Dioxide Difference and Outcome After Out-of-Hospital Cardiac Arrest*. Poster Presentation Accepted at American Thoracic Society Conference, Virtual (COVID-19).
- **Bulger N.** (2021, May). Prehospital End Tidal Carbon Dioxide Predicts Hemorrhagic Shock Upon Emergency Department Arrival. Keynote Presentation at Harborview Medical Center Department of Emergency Medicine Research Showcase, Virtual (COVID-19).
- **Bulger N.,** et al. (2021). Prehospital End Tidal Carbon Dioxide Predicts Hemorrhagic Shock Upon Emergency Department Arrival. Manuscript published in the Journal of Trauma.