



RICHARD BOERGERS, PHD, ATC THOMAS BOWMAN, PHD, ATC

2015 RESEARCH GRANT RECIPIENTS

“THE EFFECT OF LACROSSE PROTECTIVE EQUIPMENT AND ADVANCED AIRWAY EQUIPMENT ON THE ABILITY TO PROVIDE CPR”

General Grant 2015 - 2017

Funding: \$57,500

CLINICAL TAKE HOME MESSAGE

The helmet chinstrap inhibits quality ventilation (rate and volume) in airway procedures which require the seal of a mask with the face. However, the King Airway (KA) will allow quality ventilation of patients with a helmet on and chinstrap fastened. If a KA is not available, the helmet may need to be removed to provide quality ventilations. Lacrosse shoulder pads interfere with correct hand placement during CPR but do not inhibit the ability to administer chest compressions with adequate rate and depth so they may be left in place to initiate CPR.

IMPACT

The results of this study provide recommendations for applying emergency care for lacrosse athletes in cardiac and respiratory distress.

Dr. Boergers and Dr. Bowman have collaborated on at least five other research projects since being funded by the NATA Foundation.

PUBLICATIONS

Boergers RJ, Bowman TG. The effect of lacrosse protective equipment and different airway management devices on the ability to provide CPR to a manikin. *Athl Train Sports Health Care*. 2017;9(3):103-107.

Bowman TG, Boergers RJ, Lininger MR. Airway management in athletes wearing lacrosse equipment. *J Athl Train*. 2018;53(3):240-248.

Boergers RJ, Bowman TG, Lininger MR. The ability to provide quality chest compressions over lacrosse shoulder pads. *J Athl Train*. 2018;53(2):122-127.

SUBSEQUENT GRANTS RELATED TO THE FUNDING PROVIDED BY THE NATA FOUNDATION

Bowman TG, Boergers RJ. "The Effect of Lacrosse Protective Equipment on Time to First Chest Compression and First Automated External Defibrillator Shock." US Lacrosse Sports Science & Safety Research. \$14,000. 2018.



**RICHARD BOERGERS,
PHD, ATC**

Co-PI (lead)
Associate Professor
Seton Hall University

"The funding from the NATA Foundation helped me to further establish a research line in emergency management of injuries as well as enhance research collaboration opportunities and helped with the ability to seek out other funding opportunities."



**THOMAS BOWMAN,
PHD, ATC**

Co-PI
Professor
University of Lynchburg

"The support from the NATA Foundation has allowed me to expand my research agendas and solidify collaborations with colleagues. We would not have been able to complete this project without the funding provided by the NATA Foundation."