In Reply to Dr Hill

To the Editor:

We thank Dr Hill for his letter to the editor¹ regarding our recent publication, “A National Survey of Wilderness Medicine Curricula in the United States Emergency Medicine Residencies”² and appreciate the opportunity to comment.

Indeed, a study evaluating wilderness medicine (WM) education was published in 2015,³ 3 y prior to our data collection. We reference that paper here not to draw it into any critique, but as a foundation for our work. Although the 2015 study does not specify the timing of actual data collection, the listing of 187 residencies used was based on a Society for Academic Emergency Medicine directory accessed in March of 2014. In the interim, emergency medicine residency program numbers grew by almost 30%. We believe this rapid growth in residencies, rather than a specific timeframe, should be the indicator for reappraisal.

Although we too would have preferred a higher response rate, our response rate of 57% is comparable to that of the 2015 paper (56%). No analysis of non-responding programs was given in that study, so we cannot compare these points. Similarly, neither paper specifically defined WM educational content, and the model of the clinical practice of emergency medicine has not changed significantly between the 2013 and 2016 versions.^{4,5} Although indeed “every program should be teaching WM to a degree,”¹ both papers reported that programs indicated that they did not teach any WM, so the interpretation of the terminology by respondents may have been similarly limited. As such, although our approaches did differ, we believe that our paper can be viewed as complementary to the 2015 study.

Lastly, we concur in our paper that categorizing programs by geography could have yielded additional insights, and we encourage the inclusion of these data in future studies.

We appreciate Dr Hill’s statement that our study poses “more questions than answers” as an opportunity for further inquiry and look forward to contributing to the effort to cement excellent WM education in our residencies on a national level.

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References

1. Hill AD. More or less? Wilderness education in emergency medicine residencies. *Wilderness Environ Med.* 2021;32(4):555–6.
2. Goldflam K, Coughlin RF, Widdicombe AC, Della-Giustina D. A national survey of wilderness medicine curricula in United States emergency medicine residencies. *Wilderness Environ Med.* 2021;32(2):187–91.
3. Aronstam EJ, Christensen ML, Williams MP, Overton DT. Wilderness medicine curricular content in emergency medicine residency programs. *Wilderness Environ Med.* 2015;26(4):577–9.
4. Counselman FL, Borenstein MA, Chisholm CD, Epter ML, Khandelwal S, Kraus CK, et al. The 2013 model of the clinical practice of emergency medicine. *Acad Emerg Med.* 2014;21(5):574–98.
5. Counselman FL, Babu K, Edens MA, Gorgas DL, Hobgood C, Marco CA, et al. The 2016 model of the clinical practice of emergency medicine. *J Emerg Med.* 2017;52(6):846–9.

A Case of Splenic Injury Caused by a Blow from a Dolphin’s Tail Fin

To the Editor:

The common bottlenose dolphin, *Tursiops truncatus*, has a global distribution. The mammal weighs an average of 150 to 200 kg and reaches 2 to 4 m in length.¹ Dolphins are characterized as high-speed swimmers, propelled by a powerful horizontal lunate tail fin consisting of 2 flukes, which play an important role in their swimming.² They can leap in the air or stand out of the water using this tail fin. They are also intelligent creatures and able to learn tricks, perform in shows, or interact with humans after appropriate training.³ We herein report a case of splenic injury induced by a blow from a dolphin’s tail fin.

A 12-y-old boy in a wetsuit was travelling through the water while holding the dorsal fin of a trained bottlenose dolphin in an aquarium. He had no remarkable personal or family medical history and was a tourist from Saitama, located near Tokyo. When he erroneously released the dorsal fin, he sustained a sharp blow to the left flank by the dolphin’s tail fin. He acutely felt severe pain, but he returned to his hotel with his parents. He then experienced a generalized tonic clonic seizure of approximately 10 s in duration at 3 h after the injury. He vomited 5 times within 7 h after the seizure. These symptoms did not recur throughout the night or the following day. However, the flank pain did not improve. His parents called an ambulance, and he was transported to our hospital by a