**Part 1: About yourself**

Welcome! Hi everyone, my name is Kate Sanborn and I will be introducing you to this Boston Marathon module! I am full time biostatistician with a running problem …. Or a full time runner with a biostatistician problem. I have run Boston once and qualified for multiple marathon Olympic Trials while working full time in the statistical space on Orthopedic, Hematology, and Global Health studies. With experience in both fields, I’m happy to get you prepped for this module!

**Part 2: About the Boston Marathon**

To get started – whether you are a runner yourself and know a bit about Boston or if you are a bit newer to running or marathons – let’s get some background on the Boston marathon.

The Boston Marathon was first held on April 19, 1897, one year after the first modern Olympics debuted in 1896. It has been run every year since on the third Monday of April (Patriot’s Day), making it the oldest annual marathon race in the world. For the first 27 years, the Boston Marathon was approximately 24.5 miles in length and in 1924 the starting line was moved to make the course 26.2 miles to conform to the standard set by the Olympics.

Gaining entry into the Boston Marathon requires athletes to achieve age and gender-specific qualifying times, reflecting the event's competitive nature. To qualify, runners must first complete a marathon course that is certified by the World Athletics within the 18 months leading up to the marathon. However, in years when competition for spots is fierce, achieving the standard qualifying times might not suffice. This variability in entry requirements can influence the distribution of finish times, particularly when tighter standards are needed to manage the number of participants.

**Part 3: About the module(s)**

For this module, you will analyze the finish times for runners that completed the marathon. Investigating these data is useful for several reasons. Firstly, exploring these trends can help to deepen our understanding of how different factors, such as gender or age, impact marathon performances. Secondly, analyzing the distribution of finish times and the performance of top finishers against the masses provides insights into the competitive landscape of the marathon. It can identify outliers or exceptional performances and understand how elite athletes compare to average participants. Although not directly connected to these data, analyses like these can inform training strategies, highlight the effectiveness of different preparation methods, and inspire both new and experienced runners by showcasing the range of achievable performances.