James Kasting began writing *How to Find a Habitable Planet* back in 2008. He pulled much of the work and theory discussed in the book from his work with NASA in 2005 and 2006. He was part of a committee working on designs for Terrestrial Planet Finder – Coronagraph (TPF-C). James has a very extensive knowledge in the area of planet habitability. He is considered by many, including the authors of *Rare Earth*, to be one of the most knowledgeable people in the field.

*How to Find a Habitable Planet* discusses many of difficulties, realities, and possibilities involved with searching for extraterrestrial planets. The book begins by focusing on the basics such as liquid water and the habitable zone. It spends a lot of time analyzing and explaining how the Earth has evolved and changed since its creation. The Earth is the only planet that we are able to analyze in detail; many processes that have occurred on Earth are assumed to be held true on other planets as well, ceteris paribus. After it discusses the history of Earth, it moves on to discuss the distant future of the planet and how this relates and applies to other planets. The final chapters in the work discuss how extrasolar planets can be discovered, observed, and analyzed.

Kasting’s book goes into extensive detail in nearly every topic discussed. For example, he provides a formula and demonstrates the work required to determine the planetary energy balance, which is used to determine a planet’s temperature. This is well above and beyond the amount of detail and depth that I expected to find in this book. At the same time, he recognizes that some of the computations are above many of the readers of the book, so he summarizes the results in an easy-to-understand format. James also provides numerous footnotes that explain many concepts in more depth and provide extra useful information. This is certainly a nice change from *Packing for Mars* where the majority of them were in no way related to the material being discussed. The bibliography is 17 pages long, so it is very apparent that Kasting has done an extensive amount of research and preparation in writing this work.

Overall, I thought *How to Find a Habitable Planet* was a great book, and I would definitely recommend it to future classes. It is an engaging and interesting read, and really gets the reader to think about the topic of planet habitability. Many topics discussed in the book expand upon topics discussed in Astronomy 111 such as the habitable zone, the importance of a large moon in planet stability, and the role of a planet’s molten core. There are also many topics discussed that are completely new and fascinating, such as a few of the methods mentioned for finding and analyzing extrasolar planets.

Reflecting back upon the book, I cannot think of many things I disliked about the book. The one thing I could see as an issue for some readers is the amount of depth Kasting goes into. Many readers without a basic understanding of astronomy will not understand many of the references and terms used throughout the book; however, this is not a serious issue considering the target market of a book like this, and most readers should not have too much trouble understanding the gist of the information.