**Towson University Honors College Fall Orientation 2025 Common Read Discussion**

**Directions**:

The following questions will guide our discussion of the book *The Possibility of Life: Science, Imagination, and Our Quest for Kinship in the Cosmos* by Jaime Green at the Honors College Orientation. Please prepare typed responses to these ten questions. Some questions may only require a sentence or two while others may need a longer response. **You may not use AI for any part of any answer to any question**. Responses will be collected and evaluated by Honors College faculty and staff, so be sure to print out your answers before you arrive on campus (in case hookup takes longer than planned) with your full name and your orientation group name at the top of the page(s) that you submit. Don’t forget to bring these answers to the Thursday morning Orientation session.

**Questions**:

1. One of the central ideas in Green’s book is that science is not just a matter of collecting data, but also about imagining possibilities. She emphasizes this point in the Introduction: “‘What if?’ is not an unscientific question. It drives every hypothesis and prediction, every leap and act of synthesis that moves us from the unknown toward knowing.” (18) Green considers various ‘what-if’ scenarios throughout her book especially from science fiction. Which ‘what-if’ scenarios resonated the most with you and why? What do these scenarios reveal about our understanding of life?
2. Is seeking a precise definition of life worthwhile? Or does it risk limiting our understanding of what life could be, especially in alien environments? Or should we look for a working definition that is flexible enough that it can actually help us in our search for extraterrestrial life?
3. In the first chapter of her book, Green introduces the idea we might need theories to guide our search for life. That’s because, without theories, we are left with intuitions which are largely biased by our experiences and cultural background. Do you find this idea compelling? Can you think of examples in which theories have either helped or hindered scientific progress, whether in the search for extraterrestrial life or other domains?
4. S. Gould is well known for his idea of “replaying the tape of life,” suggesting that if we could rewind Earth’s history, the outcome would be different each time (Chapter 3). Do you find this thought experiment helpful for understanding life’s evolution? Or do you think it oversimplifies the complex interplay of chance and necessity in life’s evolution?
5. As debates over abortion and animal welfare illustrate, defining personhood is key for deciding how we treat other beings. The Pax colonists in Chapter 4 face this issue when they encounter the rainbow bamboo they call ‘Stevland.’ Drawing on Stevland’s story, how would you define personhood? How might this definition influence our treatment of non-human life, both on Earth and in the search for extraterrestrial life?
6. What do you think people mean when they talk about the search for ‘intelligent’ life? In other words, which criteria are typically used to define ‘intelligent’ life? Do you think that these criteria reflect a human-centric view of intelligence, and if so, how might that bias our search for extraterrestrial life?
7. The impact of discovering alien life on our worldview is a recurring theme in Green’s book. If tomorrow’s headlines announced microbial life on Mars, how would you respond to this event? What questions would you most want answered, and how might the announcement shift your worldview?
8. Suppose you are in a position to communicate with intelligent extraterrestrial life like Eleanor Arroway in Sagan’s novel *Contact* (Chapter 6). What are the first three questions you would ask them and why?
9. SETI research projects are largely funded by private donations (Chapter 6), such as the $200 million donation from Franklin Antonio in 2023. Should support and funding for SETI research come from the public instead? Why or why not? What criteria should guide the allocation of public funds to scientific research, especially in fields like astrobiology whose practical payoffs are uncertain?
10. Towards the end of her book, Green mentions her surprise when the astrobiologist Abel Mendez told her that “he doesn’t care about finding life beyond Earth.” Similarly, Green reports that the SETI scientist Jill Tarter “believes SETI offers hope, too, that the power is in the search, not the discovery.” How do you interpret these statements? Do you think that these statements have a worthwhile message?