

## Discussion Questions

### 2017 *In Vitro* Lecture: Human Organs-on-Chips Testing—Strengths and Challenges

---

1. What considerations are needed to adapt the lung-on-chip to another organ (for example, the liver)?
2. As a group, design a lung-on-chip system to evaluate a toxicant. Select a toxicant. What are the considerations as you design and set up the experiment to test the effect of the toxicant in this system?
3. Using the lung-on-chip system, what kinds of different scenarios can you envision that might influence the effect of toxicant?
4. How do the principles of the 3Rs apply to the lung-on-chip model?