

SPEAKING OF  
**MOL BIO**

# With knowledge comes great responsibility

## Season 3, Episode 3

### Episode notes

Topics and terms such as biosafety, biosecurity, containment, and contamination are things most of us have heard of and think about at some level, but with the pace of molecular biology moving faster than ever, these are topics with implications that are reaching farther than ever. We're joined by Dr. Ryan Burnette and Dr. Lauren Richardson from Merrick and Company for this episode, and they're ace communicators that help walk us through the expanding horizon and implications of these topics. This conversation starts on the basic topics, like what biocontainment is and what's needed for each of the four levels of biosafety labs, but it quickly moves beyond, shining a light on the security and containment needs for more than just the organisms. We hear about how the data and methods used to do modern molecular biology, as well as the data generated in the experiments, are equally precious and in need of protection and containment. With public health and safety on the line, and an acknowledgement that the pace of science moves faster than that of policy, we get into the idea of who really owns responsibility for protecting data. Your role might be more important than you know, so don't miss this conversation that will make you pause and think!

### About our guests

**Ryan N. Burnette, PhD**

Senior Vice President, Life Sciences, Merrick & Company

**Lauren Richardson, DVM, MPH, DACVPM**

Senior Director, Science & Technology, Merrick & Company

### Recent publications

**Ryan's**

- Richardson LC, Lewis SM, Burnette RN. [Building Capacity for Cyberbiosecurity Training](#). Front Bioeng Biotechnol. 2019 Jun 26;7:112

**Lauren's**

- Richardson LC, Connell ND, Lewis SM, Pauwels E, Murch RS. [Cyberbiosecurity: A Call for Cooperation in a New Threat Landscape](#). Front Bioeng Biotechnol. 2019 Jun 6;7:99.

"I think if there's one thing that we can, we can bestow upon the audience is to understand that you to have that responsibility to think about things related to security and misuse. Because if you don't, it might be another decade before a voluntary consortium or policy maker gets to the same conclusion." —Ryan Burnette, PhD

■ To access this and other episodes, visit [thermofisher.com/molbiopodcast](https://thermofisher.com/molbiopodcast)

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. **For Research Use Only. Not for use in diagnostic procedures.** It is the responsibility of the final formulator or end user to determine suitability and to qualify each Product Use. © 2025 Thermo Fisher Scientific Inc. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. 02\_2025