In this interview, Margaret Hardin, Director of Food Safety at Smithfield Packing Company, discusses the benefits her laboratory has experienced using the 3M™ Petrifilm™ Plate Reader (PPR). Smithfield Packing Company is a division of Smithfield Foods, the world’s largest producer of pork products.

Before your lab started using the 3M™ Petrifilm™ Plate Reader (PPR), what issues were you facing?
We were getting overwhelmed counting plates. We were reading an average of 700 plates per day, for about four to five hours per day, about five and half days each week. Because there were so many plates to read, someone was coming in on weekends to keep up with the workload. So our biggest concerns related to labor and time management.

The PPR currently reads and records results of the 3M™ Petrifilm™ Aerobic Count Plates, 3M™ Petrifilm™ Coliform Counts Plates and 3M™ Petrifilm E.coli/Coliform Count Plates. Which do you read with the PPR?
Smithfield purchased five PPRs, and we’re using three of them in our lab and two in labs at other divisions of Smithfield Foods. We’re reading all three types of plates: aerobic, coliform and E. coli/coliform count plates. In the future, we may also use the PPR to record results in an Excel spreadsheet or log file.

Do you think the PPR is easy to use?
Absolutely! Samples are easy to read accurately, and the PPR is amazingly fast. The samples just zip through it. I think that’s the biggest advantage.

What improvements has the PPR helped you make in your lab?
It’s helped with time management, labor needs and costs. Reading plates used to take us four to five hours per day. Now it takes only a few minutes. Using the PPR has reduced our need to have technicians working late into the evening, and it’s eliminated most of our weekend work. That’s cut our overtime expenses. If I estimated the total savings, they might be $20,000 per year. The PPR has also improved our turnaround time, which helps other departments that rely on the information they get from us. That helps our coworkers respond more quickly to sanitation and shelf-life issues.

What do the technicians in your lab think of the PPR?
One of them told me it’s “the best thing since sliced bread!” The PPR has definitely improved morale. If you’ve ever hand-counted plates for five hours, you know there’s a certain drudgery in it. After a while, your eyes and mind get tired. But using the PPR, counting plates isn’t overwhelming anymore. I think our technicians now enjoy counting plates, using the technology to zip through the task.

Are there other things those technicians are able to do now because they have more time?
Yes. We’ve been able to reallocate their time to address other needs. They are now free to focus on verifying counts, evaluating data or pursuing new research studies our lab has wanted to do.

Is consistency in reading results an important feature of the PPR for your lab?
Yes, our procedures must be accurate as well as consistent. The PPR fulfills both needs.

What do you think of the size, shape and look of the PPR and its use of lab space?
It fits nicely in the lab and takes up very little space because it’s compact and has a small footprint. We’ve placed it on the side of a desk next to a computer. In fact, some people may think the computer takes up more space than the PPR.

How have you found 3M’s support for the PPR?
We have not had any maintenance concerns since purchasing the three PPRs a year ago, and 3M’s customer service and technical support have been great.

Would you recommend the PPR be used by other laboratories in the food industry?
I believe the PPR could be a great benefit to companies performing large volume studies, and I’d certainly recommend it.