HONORING TECHNOLOGY DEVELOPERS

I’m going to make a suggestion—this month, thank someone you know who has published a methods or protocol article recently. Let’s give a little recognition to those who continue to make our experiments possible (not to mention simpler, cheaper, and quicker), thus providing researchers with the potential for those “moon shot” experiments we all think about.

Developers are a curious bunch, always tinkering with their experiments, thinking up new ways to make them better. Next-generation sequencing (NGS) is one of the areas where developers seem to be leaving their marks these days. As costs come down, more protocols are being published to enable smaller labs to harness the technology in ways that are optimal for their experiments. We have one such example in this issue where Anita Maki and colleagues detail a new approach to barcoding and size trimming for amplicon sequencing (page 88).

The current development trend for sequencing seems very similar to the way in which PCR advanced during the 1990s. Back then, new PCR applications and protocol modifications appeared every month in the pages of this journal and others. Technologies possessing such wide appeal encourage curious developers, who then create novel approaches in the hope of furthering the capabilities of cutting-edge techniques and instrumentation.

CRISPR/Cas9 technology has been suggested to be the next “PCR”—a revolutionary technique that will find broad usage among molecular biologists. I strongly suspect that is the case, but whether or not the technique is the next “PCR” is in the hands of current methods developers and enthusiasts throughout the life science community. The core PCR technology enabled researchers to spread their wings and explore experimental possibilities. In the case of PCR, methods developers would often create protocols even before researchers knew how to use them in experiments. CRISPR seems to be slowly moving towards this point too—new applications of the technique are appearing more regularly, spurring scientists towards more inventive experiments.

Technology developers should be applauded for their efforts, past and present, to provide the tools needed for basic and clinical research to charge forward. Without the invention of PCR and DNA sequencing, followed by decades of developers tinkering with these methods to find new experimental approaches and applications, much of what we now know about basic biology would still be a mystery.

Please send your thoughts or comments to bioeditor@biotechniques.com.