A look back at 2018

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"With the ever-increasing impact of social media, it is important to measure the influence of our publications through more than just the number of downloads"

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To all of our readers, we would like to begin 2019 by wishing you a happy New Year and by introducing you to the 66th volume of *BioTechniques*.

We will begin by taking a look back at 2018; what a year it's been! Since Future Science Group's acquisition of *BioTechniques*, we have continued to grow the journal and improve both author and reader experience. In this short piece we would like to highlight the most downloaded peer-reviewed journal content and delve into the impact of our content on multiple platforms using Altmetrics. Additionally, we would like to take a look at our digital content highlights along with what we have in store for 2019.

Journal content highlights

At the time of writing, the most downloaded *BioTechniques* article of 2018 was entitled "Automating a new host-protein assay for differentiating bacterial from viral infection to reduce operator hands-on time" [1]. This Benchmark describes a novel *in vitro* diagnostic assay that distinguishes bacterial from viral infections based on the patient immune response, enabling higher analytical performance and shorter technician hands-on time, both critical parameters when triaging febrile patients in urgent care settings. Amazingly, this article has been downloaded over 16,000 times since its publication in August.

With over 2000 downloads, another popular article from 2018 saw researchers based at Christian-Albrechts-Universität zu Kiel (Kiel, Germany) benchmark two new commercial urine cell-free DNA isolation kits [2]. Published in May, the article entitled "Quantifying cell free DNA in urine: comparison between commercial kits, impact of gender and inter-individual variation" also received attention from four news outlets.

Similarly, with over 2000 downloads, the report entitled "A probe directed recombinase amplification assay for detection of MTHFR A1298C polymorphism associated with congenital heart disease" has been well received since its publication in May. The authors propose a novel PDRA assay as a valuable tool for the detection of SNPs and demonstrate significant potential to be widely applicable in both research and clinical settings [3]. Interestingly, to our knowledge,

the proposed method is the first report to detect SNPs using one probe and one primer.

With the ever-increasing impact of social media, it is important to measure the influence of our publications through more than just the number of downloads. Altmetrics is a powerful way to measure this. It collates information from multiple different sources across different platforms to show the way in which research is being broadcast across the world.

Altmetrics features a useful graphic to visualize the 'Altmetric Attention Score' for a research output (Figure 1). The score is derived from an automated algorithm, and represents a weighted count of the amount of attention received for a research output.

The most prominent example of this from 2018 was the review entitled "Overlooked benefits of using polyclonal antibodies". With an attention score of 351 (Figure 1), it is clear that this article has reached many readers via several platforms, including 44 news outlets, 2 tweets, 1 facebook page, 1 google+ user and 5 readers on Mendeley. Interestingly, this article highlights the best practices for developing and using polyclonal antibodies, pitfalls to their use and how to avoid them, in addition to benefits to the life science community [4].

Digital content highlights

2018 was a great year for our social media following. The *BioTechniques* Facebook page grew enormously over the course of the year, from 5076 followers at the start of January ►

to over 50,000 as of December. Our other social media channels have also enjoyed increasing numbers of followers, with users being more actively engaged.

With growing social media profiles comes growing visibility of our news content online, with our top viewed news piece reaching over 150,000 views. The top three most viewed *BioTechniques* news pieces of 2018 are as follows:

1. Gray hair and your immune system – feeling stressed or sick and going gray? Researchers have established a connection between genes responsible for hair color and the immune system [5].

2. The fountain of youth – researchers at the University of Exeter (UK) find aging is reversed in human cells by new compounds [6].

3. What baby poop says about brain development – can dirty diapers predict cognitive development? [7].

2018 also saw the introduction of online-only interview and opinion pieces. Of these, the top viewed piece was written by Kent Peterson, CEO of Fluid Imaging Technologies (ME, USA), and titled “Single-use plastics: are they safe?” [8]. Peterson’s reflections on single-use plastics could not come at a more relevant time; however, his insight in this piece sheds light on a mostly-overlooked aspect of single-use devices. How can micro- or nanoparticles contaminate pharmaceuticals and what could be the effects for the provider and consumers?

If you are active on social media, be sure to follow and connect with us on Facebook (@BioTechniques), Twitter (@MyBioTechniques), Instagram (@mybiotechniques) and LinkedIn (BioTechniques).

As the *BioTechniques* community continues to grow, the readership also changes. In 2018, digital content was most read by experts

in the USA (36%) and we are also beginning to see *BioTechniques* content have a greater impact across the rest of the world (31%). We expect to see a continued growth in all areas as well as emerging scientific communities and we look forward to continuing the circulation of our content to an increasingly global audience.

Conclusion

We would like to thank our readers, contributing authors, valued Editorial Board members and peer reviewers for their continued support and collaboration as we continue to publish the latest cutting-edge research. We very much look forward to working with you all over the next year and to seeing *BioTechniques* continue to grow and serve the research community in 2019.

We now also look forward to the continuing growth of the *BioTechniques* online community in 2019, with a brand new website for news and online-only features, a new-look *BioTechniques* Forum and the introduction of more online-only features – watch this space!

There are many opportunities to be featured both in the journal and on the website,

whether in a written interview or opinion piece, a podcast or video, so do get in touch with Digital Editor, Abigail Sawyer (asawyer@biotechniques.com) to find out more.

FINANCIAL & COMPETING INTERESTS DISCLOSURE

J Martin & A Sawyer are employees of Future Science Ltd. The authors have no other

Figure 1. Altmetric attention score for review article entitled “Overlooked benefits of using polyclonal antibodies”.

Figure 2. Proportion of online readership demographics for *BioTechniques* in 2018.

relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed.

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