DOI: 10.1002/aps3.11459

EDITORIAL

Applications in Plant Sciences

The future of plant science: Applications at the intersection

Applications in Plant Sciences (*APPS*) published its first issue in January 2013, and in that issue Dr. Theresa Culley published the opening editorial as Editor-in-Chief titled "Changing technologies offer new opportunities in the plant sciences" (Culley, 2013). The editorial explored the changing technologies available to plant scientists and the need to share advances in techniques, including novel protocols and their applications, new software, reviews, and genomic resources and primers. The pace of technology development has not slowed over the course of the nine years since that editorial was published; new technologies have become widely available and there have been significant advancements in the availability and power of some of the techniques that were featured in these early issues. Similarly, *APPS* itself has advanced and changed over time; Primer Notes are no longer a part of the publication, but the journal continues to push the boundaries of plant science by exploring new methods through author-initiated submissions and comprehensive special issues.

As *APPS* approaches its 10-year publication anniversary, Dr. Culley is stepping down as Editor-in-Chief, and I am honored to take on this role. Very few among us have the privilege and burden of shepherding a new journal through its first years, and the growth and success of *APPS* over the past nine years is a remarkable achievement. Under Dr. Culley's leadership, the journal's impact factor has increased steadily from its initial impact factor of 0.667 to the current ranking of 1.936. The most popular articles (as measured by downloads) span the breadth of the plant sciences, ranging from a guide to sequencing plant genomes (Li and Harkess, 2018) to using drones in plant ecology (Cruzan et al., 2016). Throughout this time, *APPS* has remained true to its purpose as a journal that serves the botanical community. All articles are open access as a way to ensure the equitable dissemination of new techniques and software around the globe. The importance of this unhindered access to information has only been highlighted in recent years, and *APPS* has been a strong adopter of this philosophy. At the same time, the journal continues to be acutely conscious of the fiscal challenge associated with article page charges that makes this broad access possible—striking the perfect balance between them remains a key goal for the future.

APPS will continue to publish special issues in areas that interest our readers, and thanks to the hard work of Dr. Culley, Beth Parada (Managing Editor), and many guest editors, there are several in the works, including issues exploring methods in botanical DNA/RNA extraction and plant imaging, as well as a follow-up to the very popular "Low-Cost Methods in the Plant Sciences" collection (https://bsapubs.onlinelibrary.wiley.com/toc/21680450/2020/8/4). I also expect that our review articles will become increasingly valuable as a way to sort through and compare the vast array of new techniques and software being developed by different groups, many of which represent unique origins of approaches that will ultimately address the same fundamental question. In a similar way, I see *APPS* as poised to become the destination of choice for high-quality plant genome sequences that will serve as resources to the plant science community. Overall, I look forward to working with the *APPS* team and continuing to raise both the profile and utility of *APPS* as it matures. To achieve this, it is essential that we are responsive to the needs of our community, and one of my roles as the new Editor-in-Chief will be to collect input from the *APPS* Editorial Board, reviewers, authors, and readers while also recruiting new members to all of these groups. I look forward to hearing from you and working with you to help *APPS* reach its ultimate potential.

APPS is dedicated to serving the botanical community going forward, and I anticipate that the need for this journal will grow as plant biologists continue to adopt rapid advances in genomics, phenomics, and computing to non-model systems. In particular, I look forward to seeing *APPS* feature publications that allow an integrated understanding of previously understudied or challenging plant taxa in fields ranging from physiology to phylogenetics. There is a critical need for this integrated study of plants in their environments as we attempt to understand and mitigate the effects of a rapidly changing climate on wild species and ecosystems while also developing techniques to sustainably feed an ever-growing population. Plant science is the central place where all of these urgent objectives intersect, and a place where our community members can pursue questions that range from untangling how lineages diverged deep in evolutionary time to how disturbed and native plant

communities compare at the ecosystem level. Moving into the next decade, *APPS* will continue to be a resource to all plant scientists as they work toward a greater understanding across taxa and across fields.

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