

A New Century of *GENETICS*

When the great American composer Irving Berlin turned 100, he was near the end of his life. But when the Notre Dame cathedral turned 100—around the beginning of the fourteenth century—it wasn't even completed. And when the Olympics turned 100, it was just at the beginning of its run. A centennial needn't conjure up thoughts of an ending; it can instead evoke excitement and a sense that we're just hitting our stride.

Leading geneticists launched *GENETICS* in January 1916, because they recognized “the need of a journal in America for the publication of the longer and more detailed accounts of genetical investigations, with adequate illustrations” (Shull *et al.* 1916). With this issue of *GENETICS*, in January 2016, we launch the journal into its second century. How does the world of genetics today compare to what our founders faced 100 years ago?

The journal *GENETICS* was born in an era of controversy in the field. Contentious debates about the nature of inheritance raged between Mendelists and biometricians (Provine 1971). Debates continue to rage today—such as between those who embrace or eschew genome-wide association studies, and between those who commend or condemn genetically modified organisms, and between those who see the potential of using gene drive for controlling disease spread and those who question its safety (Poston 2015; O’Keeffe 2015; Spradling 2015). Some of these debates will be featured in Commentary articles we will publish over this next year, which will make it clear that our field has remained vibrant.

GENETICS was launched in response to a dearth of journals at the time. The journal’s founders hoped that launching *GENETICS* would “obviate the necessity for so large a dependence upon the forbearance and the generosity of European journals.” A lack of publication venues is certainly not a problem at the start of *GENETICS*’ second century. This proliferation of journals presents a challenge, as much to readers as to editors and publishers. How can readers deal with the ever-increasing volume of papers? How can our editors ensure that

GENETICS continues to publish our colleagues’ best work? We face challenges not encountered by editors and readers of a century ago.

We communicate our science with tools, rapidity, and distance undreamt of by our counterparts a century ago. We promote our authors’ work through the ever-expanding tools of social media. We link items in our articles to model organism databases. We enhance the methods sections in our articles by linking them to a novel mobile tool (Protocols.io 2015). We tell the stories behind the research on the GSA’s Genes to Genomes blog.

The founders of *GENETICS* innovated just by creating our journal. We innovated by employing online manuscript submission and review in the ‘90s; by adopting early online publication of accepted manuscripts in 2004; by offering authors an open access option for their articles in 2008; by moving to online only publication of the journal in 2010 (Johnston *et al.* 2009); by being one of the first journals to implement a stringent open data policy in 2010 (McIntyre 2010); by publishing innovative content such as Primers (Hawley and Ruedi 2012) and Toolbox Reviews (Johnston and Hobert 2012) in 2012, and YeastBook in 2011 (Hinnebusch and Johnston 2011), FlyBook last year (Cooley *et al.* 2015), and now WormBook coming this year; by embracing preprint servers in 2012. And we have changed the face our journal presents. Check out the journal’s new website that debuts with this issue, and the fresh new look of the journal’s name. We will continue to find ways to communicate important scientific stories that ultimately serve authors, readers, and our community.

One hundred years of publishing is something to celebrate! *GENETICS* has published some of the most influential papers in our field over the last 100 years; we have chosen 24 of them to highlight this year. Each month the journal will feature two of these classics, putting them into context and explaining their impact. We have also commissioned Perspectives articles to highlight the history of our field and our journal. The first of these, about the profound impact of the very first paper published in the journal, appears in this issue (Ganetzky and Hawley 2016). An accompanying Commentary article describes a modern connection to the second article published in *GENETICS* (Rosenberg 2016).

But as a sprightly centenarian—the comedian George Burns—said, “You can’t help getting older, but you don’t have to get old,” so we are also looking ahead to the journal’s next century. During 2016, we’ll publish Commentaries from leading geneticists on the current state of our field, seeking their views on where it should be going, and what the crucial unanswered questions are.

Our counterparts in 1916 established “a journal that devotes itself to the encouragement of fundamental investigations in genetics” because they appreciated the importance of basic research. They expected that “the eager interest with which modern discoveries in genetics have been followed . . . should assure a hearty welcome” for their journal. The welcome was indeed hearty: this journal has published over 18,000 reports of genetics investigations over the last 100 years. In its next century effective and new ways to communicate our findings in *GENETICS* will remain more important than ever, because the field of genetics has never been more important.

Please help us continue the journal’s tradition of leadership in the field by reading it, by reviewing for it when asked, and by submitting some of your best work for publication in the second century of *GENETICS*.

Mark Johnston, Editor-in-Chief

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