

The Other Life of Articles

WHEN we write an article, we usually do so for three constituencies. First, we write it for ourselves. No action more clearly codifies a research endeavor than writing an article about the research. Flaws and gaps become apparent and are corrected or filled, and new lines of inquiry present themselves. To quote Norman Mailer, “I don’t know what I think until I write it down.” Second, we write for the reviewers—we probably shouldn’t, but we do. Finally, and most importantly, we write for our peers. Unless we communicate our findings, we might as well not have made them.

But there is an important, and often ignored, fourth set of readers: undergraduates and beginning graduate students. Having undergraduates read and critically analyze articles is a vital part of training them to be scientists, to understand how science is actually done, and to read and think critically. The importance of incorporating primary literature into the curriculum has been stressed repeatedly in such initiatives as the National Science Foundation/American Association for the Advancement of Science (AAAS) “Vision and Change in Undergraduate Biology Education,” where many of the core competencies can be developed using peer-reviewed articles as a vehicle. Currently, if primary literature is used in undergraduate courses, the focus tends to be on classic articles written decades ago and on articles with approaches and technologies that are accessible to a college junior or senior. Those articles are beautiful, but often they are older than the professor, much less the students! Additionally, educators often clamor for resources that allow them to expose their

students to current findings without overwhelming them. How then can we make current articles useful in an undergraduate classroom or a senior seminar setting?

With this issue of *GENETICS*, we introduce a new type of article called Primers, designed to do just that. Each Primer will be tied to a current article in *GENETICS* and will lay out the necessary background (*i.e.*, what was the question and why did that question matter?), explain the hypothesis or approach, describe the methodology, guide the reader through the results, and provide a precise summation of the discussion. The goal is not to replace the article, but rather to make the article itself accessible by offering a road map. Having a Primer in hand will make choosing an article and teaching it effectively much easier for educators. However, our real hope is that the Primer will be the “jumping off” point that allows students to dive confidently into the article.

See for yourself, as *GENETICS* Primer Editor Elizabeth A. De Stasio’s [Primer](#) introduces and reinforces concepts of reverse genetics and RNA interference (RNAi), suppressor screens, synthetic phenotypes, and phenocopy. Our inaugural Primer accompanies “A network of genes antagonistic to the LIN-35 retinoblastoma protein of *C. elegans*” (Polley and Fay 2012).

The Genetics Society of America and *GENETICS* are dedicated to promoting excellence in genetics education, and Primers are a valuable new tool to aid in this endeavor. With such tools, we hope students will explore the process of science firsthand, to learn about how our community presents its findings, and to be engaged in their courses and in our field via exciting new discoveries.

*R. Scott Hawley, Stowers Institute for Medical Research
Elizabeth A. Ruedi, Director of Education and Professional Development,
Genetics Society of America*