

## From the Editor

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Arthur N. Popper



You will note a small change in this issue of *Acoustics Today* (AT). In the past, we have included short biographies of each author at the end of each article. However, we discovered that in many issues of *Acoustics Today*, the cumulative space taken up by the biographies was several pages. Because we are limited in the number pages in each issue and wanted to be able to devote more space to the articles and essays, we decided to move the biographies to the web. Therefore, the author listing at the end of each article now includes a URL and a QR code that takes you to the biographies for that article. (We did consider eliminating the biographies, but a quick survey of some readers supported the view that readers like and value learning a little about the authors, especially when the authors are younger members.) If you have any thoughts about this change or whether there should even be the short biographies, please don't hesitate to send me an email ([apopper@umd.edu](mailto:apopper@umd.edu)).

This issue of AT has five articles. The first by David R. Dall'Osto, Peter H. Dahl, and N. Ross Chapman discusses the sounds from underwater explosions. As you read the article, you will see that I have been collaborating with David and Peter to examine the effects of explosions on fishes, and my curiosity about the signals to which we were exposing the animals led me to suggest their doing this article. Other AT articles on underwater acoustics can be found at [bit.ly/AT-Underwater\\_Acoustics](https://bit.ly/AT-Underwater_Acoustics).

The second article by Erin Jimenez and Ashwin A. Bhandiwad is about one of the most important biological models being used today to help understand the genetics of human development and disease, the zebrafish. Erin and Ashwin focus on one very important aspect of work with this diminutive species: its role in understanding the genetics of human hearing.

This is followed by a discussion of informational masking by Gerald Kidd Jr. and Christopher Conroy. In their article, Gerald and Chris give what I think is the best explanation I have seen of the differences between informational and energetic masking. Indeed, most readers

will easily relate to the fascinating issues associated with informational masking because we all encounter it in our daily lives and in special situations like the social events at meetings of the Acoustical Society of America (ASA). See [bit.ly/AT-psychoacoustics](https://bit.ly/AT-psychoacoustics) for more articles on human hearing.

Hearing is also the subject of the fourth article by Nicole Nguyen, Larissa Curry, and Matthew J. Goupell. The authors discuss the use of cochlear implants (CIs) in improving human hearing. They not only compare the value of CIs with that of more typical hearing aids, but they also consider a range of other things about CIs, including adapting to their use and the impacts of getting the devices at different ages. "AT Collections" has more articles on devices used to improve human hearing (see [bit.ly/AT-Health](https://bit.ly/AT-Health)).

The fifth article adds to our series about the use of ultrasound in biomedicine (see [bit.ly/AT-ultrasound](https://bit.ly/AT-ultrasound)). The authors, Matthew W. Urban, Tuhin Roy, Wilkins Aquino, Murthy N. Guddati, and James F. Greenleaf, focus on how ultrasound is used in investigating the biomechanics of the arteries that are part of the human circulatory system. As the authors show, developing noninvasive methods to understand the biomechanics of the circulatory system is of great value as humans age because things like blood vessel elasticity changes.

We have three "Sound Perspectives" essays. The first is part of our "Conversation with a Colleague" series (see [bit.ly/ATC-CWC](https://bit.ly/ATC-CWC)). This essay, edited by Micheal Dent, features Ruth Litovsky, a faculty member at the University of Wisconsin-Madison, who has made major contributions to the understanding of how the brain processes and uses sounds from two ears (binaural hearing).

Our second essay by Brian G. Ferguson, R. Lee Culver, and Kay L. Gemba introduces the latest international student challenge from the ASA Technical Committee (TC) on Signal Processing in Acoustics. All ASA student members are invited, individually or in groups, to participate in the challenge and compete for a cash award. I would also encourage others to look at the challenge because it is quite